SERIES 4400, 4500/4600/LCD ICE BEVERAGE DISPENSER MODELS 22, 30

Operations Manual

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ISO 9001:2000 Quality System Certified

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ABOUT THE LANCER IBD 4500/4600/LCD Series

The IBD 4500 Series is designed using the highest quality materials and state-of-the-art technology

PRE-INSTALLATION CHECKLIST

POST MIX ACCESSORIES:

- ☐ CO2 Regulator Set
- ☐ Beverage Tubing
- ☐ CO2 Supply
- ☐ Water Booster
- ☐ Oetiker Clamps/Fittings
- ☐ Water Regulator

BIB SYSTEM:

- ☐ BIB Rack
- ☐ BIB Regulator Set
- ☐ BIB Connectors - verify correct amount for syrup lineup
- ☐ BIB Syrup Boxes

DOUBLE CHECK:

- ☐ CO2 Regulator Set Is the countertop level?
- ☐ Is there enough space to install the dispenser? Be sure to include space for a top-mounted ice machine, if necessary.
- ☐ Can the countertop support the weight of the dispenser? Be sure to include the weight of an ice machine (if necessary) plus the weight of the ice.
- ☐ Does the top-mounted ice machine have a minimum clearance on all sides?

CONSIDER LOCATION OF THE FOLLOWING PRIOR TO INSTALL

- ☐ Water supply lines
- ☐ Drain
- ☐ Grounded electrical outlet
- ☐ Heating and air conditioning ducts
- ☐ Away from direct sunlight (avoid) or overhead lighting

SPECIFICATIONS

ICE BEVERAGE DISPENSER 22”

85-4526H	4500, IBD, 6V, 115V/60Hz
85-4536H	4500, IBD, 6V, 230V/50-60Hz
85-4420H	4400, ICE DISPENSER, 115V/60Hz
85-4430H	4400, ICE DISPENSER, 230V/50-60Hz
85-4526N	4500, IBD, 6V, 115V/50Hz, PELLET ICE ONLY*
85-4530N	4500, IBD, 6V, 230V/50Hz, PELLET ICE ONLY*

DIMENSIONS

Height:	35 3/8 Inches (899 mm)
Width:	22 Inches (558.8 mm)
Depth:	30 1/2 Inches (775 mm)

WEIGHT

Shipping:	255 lbs (102.2 kg)
Counter Weight (no ice)	225 lbs (115.9 kg)

ICE

Capacity:	180 lbs (81.8 kg)
Dispensable:	150 lbs (68.1 kg)

SPACE REQUIRED

Left Side and Right side:	6 inches (152.4 mm)
Top and Rear:	6 inches (152.4 mm)
Legs (optional)**:**	4 inches (101.6 mm)

FITTINGS

Soda/Plain water inlet:	3/8” barb
Brand syrup inlets:	3/8” barb

PLAIN WATER

Min flowing pressure: 75 PSIG (5.28 kg/cm^2, 5.16 BAR)

SODA WATER

Per carbonator manufacturer recommendations.

SPECIFICATIONS

ICE BEVERAGE DISPENSER 30”

85-4541N	4500, IBD, 10V, 115V/60Hz, PELLET ICE ONLY*
85-4558N	4500, IBD, 8V, 230V/50Hz, PELLET ICE ONLY*
85-4548H	4500, IBD/LCD, 8V, 115V/50Hz
85-4548N	4500, IBD, 8V, 230V/50-60Hz, PELLET ICE ONLY*
85-4558H	4500, IBD/LCD, 8V, 230V/50-60Hz
85-4541H	4500, IBD, 10V, 115V/60Hz
85-4440H	4400, ICE DISPENSER, 115V/60Hz
85-4450H	4400, ICE DISPENSER, 230V/50-60Hz
85-4658H	4600, IBD/NCP, 8V, 230V/50-60Hz

DIMENSIONS

Height:	35 3/8 Inches (899 mm)
Width:	30 Inches (762 mm)
Depth:	30 1/2 Inches (775 mm)

WEIGHT

Shipping:	305 lbs (138.6 kg)
LCD Unit (no ice)	285 lbs (129.3 kg)
Counter Weight (no ice)	275 lbs (125.0 kg)

ICE*

Capacity:	250 lbs (113.6 kg)
Dispensable:	175 lbs (79.5 kg)

SPACE REQUIRED

Left Side and Right side:	6 inches (152.4 mm)
Top and Rear:	6 inches (152.4 mm)
Legs (optional)**:**	4 inches (101.6 mm)

FITTINGS

Soda/Plain water inlet:	3/8” barb
Brand syrup inlets:	3/8” barb

PLAIN WATER

Min flowing pressure: 75 PSIG (5.28 kg/cm^2, 5.16 BAR)

SODA WATER

Per carbonator manufacturer recommendations.

Pellet Ice Specification available upon request

WARNING/ADVERTENCIA/AVERTISSEMENT

⚠ The dispenser is for indoor use only. This unit is not a toy. It should not be used by children or infirm persons without supervision. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. This unit is not designed to dispense dairy products. The min/max ambient operating temperature for the dispenser is 40 to 105 degrees F.

⚠ El dispensador sólo debe usarse en interiores. Esta unidad no es un juguete. No la deben usar niños ni personas discapacitadas sin supervisión. Esta unidad no está destinada al uso por parte de personas (incluso niños) con capacidad física, sensorial o mental reducida, o sin experiencia y conocimientos suficientes, a menos que una persona responsable de su seguridad les haya dado supervisión o capacitación en el uso de la unidad. Esta unidad no ha sido diseñada para suministrar productos lácteos. La temperatura ambiente operativa mínima / máxima para el dispensador es de 40 a 105 grados F.

⚠ Le distributeur est destiné à un usage à l'intérieur seulement. Cet appareil n'est pas un jouet. Il ne devrait pas être utilisé par des enfants ou des personnes infirmes sans surveillance. Cet appareil n'est pas destiné à un usage par des personnes (y compris les enfants) ayant des capacités physiques, sensorielles ou mentales réduites, ou manquant d'expérience et de connaissances, à moins qu'elles obtiennent de la surveillance ou des instructions au sujet de l'utilisation de l'appareil de la part d'une personne chargée de leur sécurité. Cet appareil n'est pas conçu pour distribuer des produits laitiers. La température de service ambiante minimum/maximum pour le distributeur est de 40 à 105 degrés F.

ELECTRICAL WARNING/ADVERTENCIA ELÉCTRICA/ AVERTISSEMENT ÉLECTRIQUE

⚠ Check the dispenser serial number plate for correct electrical requirements of unit. Do not plug into a wall electrical outlet unless the current shown on the serial number plate agrees with local current available. Follow all local electrical codes when making connections. Each dispenser must have a separate electrical circuit. Do not use extension cords with this unit. Do not 'gang' together with other electrical devices on the same outlet. The keyswitch does not disable the line voltage to the transformer primary. Always disconnect electrical power to the unit to prevent personal injury before attempting any internal maintenance. The resettable breaker switch should not be used as a substitute for unplugging the dispenser from the power source to service the unit. Only qualified personnel should service internal components of electrical control housing. Make sure that all water lines are tight and units are dry before making any electrical connections!

⚠ Verifique la placa con el número de serie del dispensador, donde encontrará los requisitos eléctricos correctos de la unidad. No enchufe la unidad en un tomacorriente de pared a menos que la corriente indicada en la placa con el número de serie concuerde con la corriente local disponible. Al hacer las conexiones, respete todos los códigos eléctricos locales. Cada dispensador debe tener un circuito eléctrico independiente. No use extensiones con esta unidad. No la conecte junto con otros dispositivos eléctricos al mismo tomacorriente. El interruptor de llave no corta el voltaje de línea al transformador primario desconecte siempre la alimentación eléctrica a la unidad para evitar lesiones personales antes de tratar de realizar tareas de mantenimiento. El disyuntor de sobrecarga reseteable no se debe usar como sustituto para desenchufar el dispensador de la fuente de alimentación para realizar tareas de servicio de la unidad. El servicio de los componentes internos de la caja de control eléctrico debe confiarse exclusivamente a personal calificado. Asegúrese de que todas las líneas de agua estén ajustadas y las unidades estén secas antes de hacer conexiones eléctricas.

⚠ Examinez la plaque de numéro de série du distributeur pour connaître les bonnes exigences en matière d'électricité pour l'appareil. Ne le branchez pas à une prise électrique murale à moins que le courant indiqué sur la plaque de numéro de série corresponde au courant local disponible. Respectez tous les codes électriques locaux lorsque vous faites des connexions. Chaque distributrice doit avoir un circuit électrique séparé. N'utilisez pas de cordons prolongateurs avec cet appareil. Ne pas le brancher avec d'autres appareils électriques sur la même prise. L'interrupteur à clé ne coupe pas la tension secteur au transformateur primaire. Débranchez toujours le courant électrique à l'appareil, afin de prévenir des blessures, avant de faire un entretien interne quelconque. Le disjoncteur réarmable ne devrait pas être utilisé au lieu de débrancher le distributeur de la source d'alimentation en électricité pour faire de l'entretien/une réparation de l'appareil. Seul le personnel qualifié devrait faire l'entretien/la réparation des composants internes dans le logement des commandes électriques. Assurez-vous que toutes les conduites d'eau sont étanches et que les appareils sont secs avant de faire des connexions électriques!

CO^2/CARBON DIOXIDE /EL ANHÍDRIDO CARBÓNICO/ DIOXYDE DE CARBONE

Carbon Dioxide (CO2) is a colorless, noncombustible gas with a light pungent odor. High percentages of CO2 may displace oxygen in the blood. Prolonged exposure to CO2 can be harmful. Personnel exposed to high concentrations of CO2 gas will experience tremors which are followed by a loss of consciousness and suffocation. If a CO2 gas leak is suspected, immediately ventilate the contaminated area before attempting to repair the leak. Strict attention must be observed in the prevention of CO2 gas leaks in the entire CO2 and soft drink system.

El anhídrido carbónico (CO2) es un gas incoloro, no combustible, con un olor pungente ligero. Altos porcentajes de CO2 en la sangre pueden desplazar el oxígeno en la sangre. La exposición prolongada al CO2 puede ser nociva. El personal expuesto a concentraciones altas de CO2 sufre temblores seguidos de la pérdida de la consciencia y sofocación. Si se sospecha que existe una pérdida de CO2, ventile el área contaminada antes de tratar de reparar la pérdida. Hay que prestar suma atención para evitar pérdidas de CO2 en todo el sistema de CO2 y de bebidas gaseosas.

Le dioxyde de carbone (CO2) est plus lourd que l'air et déplace l'oxygène. Le CO2 est un gaz incolore et incombustible, ayant une odeur un peu âcre. Des concentrations fortes de CO2 peuvent déplacer l'oxygène dans le sang. Une exposition prolongée au CO2 peut être nocive. Le personnel exposé à de fortes concentrations de CO2 gazeux éprouvera des tremblements, suivis rapidement d'une perte de conscience et de suffocation. On doit faire très attention de prévenir les fuites de CO2 gazeux dans le système entier de CO2 et de boisson gazeuse. Si on suspecte qu'il y a une fuite de CO2 gazeux, aérez le secteur contaminé immédiatement avant d'essayer de réparer la fuite.

WATER NOTICE/AGUA AVISO/PRÉAVIS DE L'EAU

Provide an adequate potable water supply. Water pipe connections and fixtures directly connected to a potable water supply must be sized, installed, and maintained according to federal, state, and local laws. The water supply line must be at least a 3/8 inches (9.525 mm) pipe with a minimum of 20 PSI (137.9 kPa) line pressure, but not exceeding a maximum of 50 PSI (345 kPa). Water pressure exceeding 50 PSI (345 kPa) must be reduced to 50 PSI (345 kPa) with the provided pressure regulator. Use a filter in the water line to avoid equipment damage and beverage off-taste. Check the water filter periodically, as required by local conditions. The water supply must be protected by means of an air gap, a backflow prevention device (located upstream of the CO2 injection system) or another approved method to comply with NSF standards. A leaking inlet water check valve will allow carbonated water to flow back through the pump when it is shut off and contaminate the water supply. Ensure the backflow prevention device complies with ASSE and local standards. It is the responsibility of the installer to ensure compliance.

Proporcione un suministro adecuado de agua potable. La línea de suministro de agua debe ser de una tubería de por lo menos 3/8 pulgadas (9.525 mm) con una presión de línea mínima de 20 PSI (137.9 kPa) , pero sin superar el máximo de 50 PSI (345 kPa). La presión de agua que supere los 50 PSI se debe reducir a 50 PSI (345 kPa) con un regulador de presión. Use un filtro en la línea de agua para evitar daños al equipo y cierto sabor raro en las bebidas. Verifique periódicamente el filtro de agua de acuerdo con las condiciones imperantes. El suministro de agua debe estar protegido por una separación de aire, un dispositivo de prevención del contraflujo (situado antes del sistema de inyección de CO2) u otro método aprobado para cumplir las normas NSF. Si la válvula de retención de entrada de agua tuviera pérdidas, permitiría el contraflujo del agua carbonatada a través de la bomba cuando se la detiene y contaminaría el suministro de agua. Asegúrese de que el dispositivo de prevención del contraflujo cumpla con las normas locales y de ASSE. Es responsabilidad del instalador cumplir con estos requisitos.

Fournissez une alimentation en eau potable adéquate. Les connexions et les dispositifs de conduite d'eau connectés directement à une alimentation en eau potable doivent être calibrés, installés et maintenus selon les lois fédérales, provinciales et locales. La conduite d'alimentation en eau doit être un tuyau d'au moins 3/8 pouces (9.525 millimètres) avec une pression de ligne minimum de 20 LPC (137.9 kPa) , mais ne doit pas dépasser un maximum de 50 LPC (345 kPa). Une pression d'eau de plus de 50 LPC (345 kPa) doit être réduite à 550 LPC (345 kPa) avec le régulateur de pression fourni. Utilisez un filtre dans la conduite d'eau pour éviter des dommages à l'équipement et un goût des boissons qui n'est pas juste. Vérifiez le filtre à eau périodiquement, selon les exigences des conditions locales. L'alimentation en eau doit être protégée au moyen d'un intervalle d'air, un disconnecteur hydraulique (situé en amont du système d'injection de CO2) ou une autre méthode approuvée pour se conformer aux normes de la NSF. Un clapet antiretour pour l'eau entrante qui fuie permettra à l'eau gazeuse de repasser par la pompe quand elle est fermée et de contaminer l'alimentation en eau. Assurez-vous que le disjoncteur hydraulique soit conforme aux normes de l'ASSE et locales. L'installateur est responsable d'assurer la conformité.

ⓘ DISPENSER INSTALLATION HIGHLIGHTS ⓘ

This unit has been factory sanitized per Lancer specifications.

Listed below are ten critical elements which will aid in a successful installation.

1. Fill water bath until water overflows from tank overflow tube.
2. The carbonator pump motor must be disconnected from the power supply prior to connection to water supply for initial build up of ice bank. Failure to do so will result in automatic shut off of carbonator (see item 6 below) or damage to the pump.
3. If this dispenser is installed in an area that is susceptible to ±10% variation of the nominal line voltage, consider installing a surge protector or similar protection device.
4. There is a **five (5) minute delay** which prevents the compressor and condenser fan from starting until the delay has lapsed.

   If electrical current is interrupted, there is always a **five (5) minute delay** before the compressor starts.
5. The unit is equipped with a protective timer for the carbonator pump motor, set for three (3) minutes. If the carbonator motor has timed out, it must be manually reset by either momentarily unplugging the unit or switching off the ON/OFF switch (if present). Once power is restored, the five (5) minute compressor delay would be in effect.
6. Supply Water Pressure: Minimum - 25 PSI (172 kPa, 1.76 kg/cm^2, 1.72 BAR); Maximum - 50 PSI (345 kPa, 3.52 kg/cm^2, 3.45 BAR); If pressure is over 50 PSIG, a water pressure regulator must be used.
7. On units with the built in water regulator, the regulator must be removed if inlet water pressure is less than 25 PSIG.
8. **CO2 Pressure: Recommend nominal pressure 70 PSIG (483 kPa, 4.92 kg/cm^2, 4.83 BAR). Pressure may be reduced to a minimum of 60 PSIG (414 kPa, 4.22kg/cm^2, 4.13 BAR) if remote syrup pumps are being used. It may be increased to a maximum of 80 PSIG (552 kPa, 5.62kg/cm^2, 5.52 BAR) only when internal syrup pumps are being used with highly viscous syrups. *Important: Internal syrup pumps may not work at pressures less than 60 PSIG. CO2 pressure over 80 PSIG may result in damage or leakage from the syrup pump system or may cause excessive foam in the drink.***
9. Bag-in-box (BIB) syrup packages must be within 6 feet (1.83 m) from unit when internal syrup pumps are being used.
10. Valve Adjustment: Make sure drink temperature is below 40°F (4.4°C) before adjusting brix.

ⓘ PUNTOS IMPORTANTES EN LA UNIDAD DISPENSADORA ⓘ

Esta tin/dad ha sido saneada en fabrica por las especificaciones de Coca-Cola.

A continuacion se relacionan 10 puntos importantes para una connecta instalacion.

1. Llene el bano-Maria hasta que el agua se desborde sobre el tubo que controla la derrama del tanque.
2. El motor de la bomba del carbonatador debe desconectarse electricamente antes de conectar el suministro de agua para la formacion inicial del banco de hielo. De no hacerse esto resultaria en un bloqueo automatico del carbonatador (ver abajo el punto 6) o en danos a la bomba.
3. Si la unidad va a ser instalada en un area en la que puedan darse variaciones de voltage de ± 6 - 10% de su valor nominal, se debe considerar la conveniencia de instalar un estabilizador de corriente o sistema de proteccion similar.
4. Hay una demora de 5 minutos que evita que el compresor y el abanico del condensador arranquen hasta pasado ese tiempo. Si hay algun corte en la corriente electrica siempre se producira esa demora de 5 minutos antes de arrancar el compresor.
5. La unidad esta provista de un protector de tiempo para el motor de la bomba del carbonatador, regulado en 3 minutos. Si el motor del carbonatador se desajustara, se deabe restablecer manualmente, bien desconectando electricamente la unidad o desconectando el interrupter on/off (si lo tiene). Una vez se restablezca la corriente, la demora de los 5 minutos sera efectiva nuevamente.
6. Presión de suministro del agua de red: Minimo 25 PSIG/0.172Mpa/172000Pa/1.72bar (1.76 kg/cm^2). Maximo 50 PSIG/0.345Mpa/345000Pa/3.45bar (3.52 kg/cm^2). En unidades sin regulador de presión incorporado, si la presión del agua es superior a 50 PSIG se debe usar un regulador de presión.
7. En unidades con regulador de presión incorporado, el regulador debe der eliminado cuando la presión de entrada de agua sea inferior a 25 PSIG.
8. PRESION CO_2: Presión nominal recomendada **70 PSIG (483 kPa, 4.92 kg/cm^2, 4.83 BAR)**. Se puede reducir la presión a un minimo de **60 PSIG (414 kPa, 4.22kg/cm^2, 4.13 BAR**), si se utilizan bombas de jarabe internas con jarabes de alta viscosidad. **IMPORTANTE:** Las bombas de jarabe intemas pueden no trabajr a presiónes par debajo de 60 PSIG. Presiónes superiores a 80 PSIG pueden dañar o causer fugas en el sistema de bombeo de jarabe o producir excesiva espuma en el producto terminado.
9. Los envases de jarabe Bag-In-Box deben setar situados a menos de 6 pies (2 metros) de la unidad cuando se utilicen bombas de jarabe intemas.
10. Ajuste de las valvulas: Cerciórese de que la temperatura de la bebida es inferior a 4.4°C (40°F) antes de regular el coeficiente Brix.

ⓘ REGLES DE SECURITE POUR L'NSTALLATION DU DISTRIBUTEUR DE SODAS ⓘ

La proprètè da cet ensamable est assurè à l'usine sulvant les spècifications èmis par Coca-Cola.

Il est essentiel de respecter les 10 points suivants pour l'installation de l'appareil:

1. Remplir le bain-Maire jusqu'a ce que l'eau dèborde par le tuyau de trop-plein du rèservoir.
2. Le moteur de la pompe du carbonateur doit etre dèbranchè de l'alimentation èlectrique avant l'arrivèe de l'eau pour la formation initiale de la glace. Oublier ou nègliger cette opèration provoquera l'arret automatique du carbonateur (voir le point 6 cidessous) ou causera des dommages à la pompe.
3. Si le distributeur es installè dans une zone ou la tension èlectrique nominale est susceptible de variations de (±) 10%, il est conseillè d'installer un appaeil de protection contre les sautes de courant.
4. Un d'lai de 5 minutes empeche le compresseur et la ventilation du condesateur de se mettre en marche avant que ce lees de temps ne se soit ècoulè. Lorsque le courant èlectrique es interrompu, il y a toujours un dèlai de 5 minutes avant que le presseur ne se mette en.
5. L' unitè est èquipèe d'une minuterie de protection pour le moteur de la pompe de carbonateur, règlèe sur 3 minutes. Si le moteur du carbonateur s'est dèrèglèe, il faut refaire le règlage manuellement, soit en dèbranchant temporairement l'unitè, solt en arretant l'appareil avec l'interrupteur (s'il y en a un). Le rètablissement du courant sera suivi par le de'lai de 5 minutes du compresseur.
6. Pression de l'eau: Minimum 25 PSIG (1,76 kg/cm^2); Maximum 50 PSIG (3,52 kg/cm^2). Sur les unitès qui n'ont pas de règulateur de pression d'eau incorprè, si la pression d'H_2O est supèrieure à 50 PSIG, un règulateur de pression d'eau doit etre utilsisè.
7. Sur les unitès avec règulateur d'eau incorporè, le règulateur doit etre enlevè si la pression d'arrivve est inferièure à 25 PSIG.
8. Pression de CO_2: on recommande une pression nominal de 70 PSIG (4,92 kg/cm^2; 4,83 BAR). La pression peut etre rèduite à un minumum de 60 PSIG (4,22 kg/cm^2, 4,13 BAR) si on utilise des pompes à sirop sèparès. Elle peut etre aumentee jusqu'à un maximum de 80 PSIG (5,62 kg/cm^2, 5,52 BAR) uniquement les pompes à sirop internes sont utilisèes avec des sirops très èpals. ATTENTION: Les pompes à sirop internes peuvent ne pas fonctionner à des fuites dans le système de ponmpage du sirop, ou produire trop de mousse dans les boissons.
9. Le sac dans les paquets de sirop doit etre à 1,83 m. au plus de l'unitè quand on utilise les pompes à sirop internes.
10. Règlage des valves: S' assurer que la tempèrature de la boisson est infèrieure a 4.4°C (40°F) avant de règler le degrè Brix.

AUTOMATIC AGITATION/AGITACIÓN AUTOMÁTICA/ AGITATION AUTOMATIQUE

⚠ **Units equipped with automatic agitation and will activate unexpectedly.**
Do not place hands or foreign objects in the ice storage unit compartment.
Unplug the dispenser during servicing, cleaning and sanitizing.

⚠ **Las unidades equipadas con agitación se activan repentinamente.**
No ponga las manos ni obetos extraños en el compartimiento de almacenamiento de hielo.
Desenchufe el dispensador durante tareas de servicio, limpieza y esterilzación.

⚠ **Les appareils sont munis d'agitation automatique et s'activeront de manière imprévue.**
Ne placez pas vos mains ou des corps étrangers dans le compartiment de stockage de l'appareil.
Débranchez le distributeur pendant son entretien, son nettoyage et sa désinfection

1. INSTALLATION

BEFORE GETTING STARTED

Each unit is tested under operating conditions and is thoroughly inspected before shipment. At the time of shipment, the carrier accepts responsibility for the unit. Upon receiving the unit, carefully inspect the carton for visible damage. If damage exists, have the carrier note the damage on the freight bill and file a claim with carrier. Responsibility for damage to the dispenser lies with the carrier.

THINGS TO CONSIDER:

Connecting lines can be run through the back of the dispenser or extend down through a counter cutout. Seal the dispenser directly on the countertop.

1.1 UNPACKING THE DISPENSER

A. Set shipping carton upright on the floor. Cut band and remove. Open top of carton and remove interior packing.

B. Lift carton up and off of the dispenser. Remove wood shipping base from the bottom of the dispenser. (Support dispenser while removing shipping base to prevent damage to the dispenser.)

C. Remove installation parts kits from the ice compartment.

D. Inspect unit and parts for concealed damage(s). If damage exists, notify delivering carrier and file a claim against same.

1.2 DRAIN SPIDER

The drain spider (Fig 1) is located directly in the center of the bin under the ice shroud. The coldplate has a cavity designed to hold the drain spider. During shipment or installation, the drain spider may become dislodged from its original position.

FIGURE 1

Prior to installing the dispenser, ensure the drain spider is in the correct position.This will prevent drain clog issues. Inspect the lower bin area and reach under the shroud to ensure the drain spider is secure in the coldplate cutout. If the spider is not in place, proceed with the following steps:

A. Remove agitator clip and pin from agitator bar (Fig 2).

B. Remove agitator bar from paddle wheel.

C. Remove paddle wheel.

D. Remove ice shroud by lifting back then out of bin.

E. Locate drain spider and reinstall in the coldplate cavity where drain line exits.

F. Reinstall all components. Ensure agitator clip is locked.

FIGURE 2

1.3 SELECTING A LOCATION FOR THE DISPENSER

Connecting lines can be run through the back of the dispenser or extend down through a counter cutout. Seal the dispenser directly on the countertop. Counter Cutouts for each unit are located in the Section 7. Illustrations, Parts Listings and Wiring Diagrams.

A. Select a level, well-ventilated, accessible location away from direct sunlight (avoid) or overhead lighting (convenient to water, soda, and syrup lines and open type drain), a properly grounded electric supply and ensure sufficient clearance for air circulation.

   If an icemaker is not installed, sufficient clearance must be provided, to allow for filling the ice compartment with a five gallon bucket (a minimum of 16 inches is recommended). Lancer does not recommend the use of shaved, flake, nugget, or pellet ice in the dispenser. The dispenser will only operate properly with cube ice.

B. *The selected location should be able to support the weight of the dispenser, ice and possibly an icemaker being installed after counter cut out is made.* Total weight (with icemaker) for the IBD22 unit, IBD25 unit, IBD30 unit, or IBD44 unit could exceed 800 pounds (363.6kg).

C. Unit may be installed directly on the countertop or on legs supplied with the unit. If installed directly on the counter, the unit must be sealed to the countertop with an FDA approved sealant. *If an icemaker is to be mounted on top of dispenser, do not install dispenser on legs.*

⚠ CAUTION/PRECAUCIÓN/ATTENTION ⚠

FAILURE TO MAINTAIN SPECIFIED CLEARANCE WILL CAUSE THE COMPRESSOR TO OVERHEAT AND WILL RESULT IN COMPRESSOR FAILURE. ⚠ SI NO DEJA EL ESPACIO LIBRE ESPECIFICADO EL COMPRESOR PUEDE RECALENTAR Y FALLAR. ⚠ LE FAIT DE NE PAS MAINTENIR LE DÉGAGEMENT SPÉCIFIÉ FERA SURCHAUFFER LE COMPRESSEUR ET AURA COMME CONSÉQUENCE UNE DÉFAILLANCE DU COMPRESSEUR.

NOTE: Fill ice with merchandiser intact.

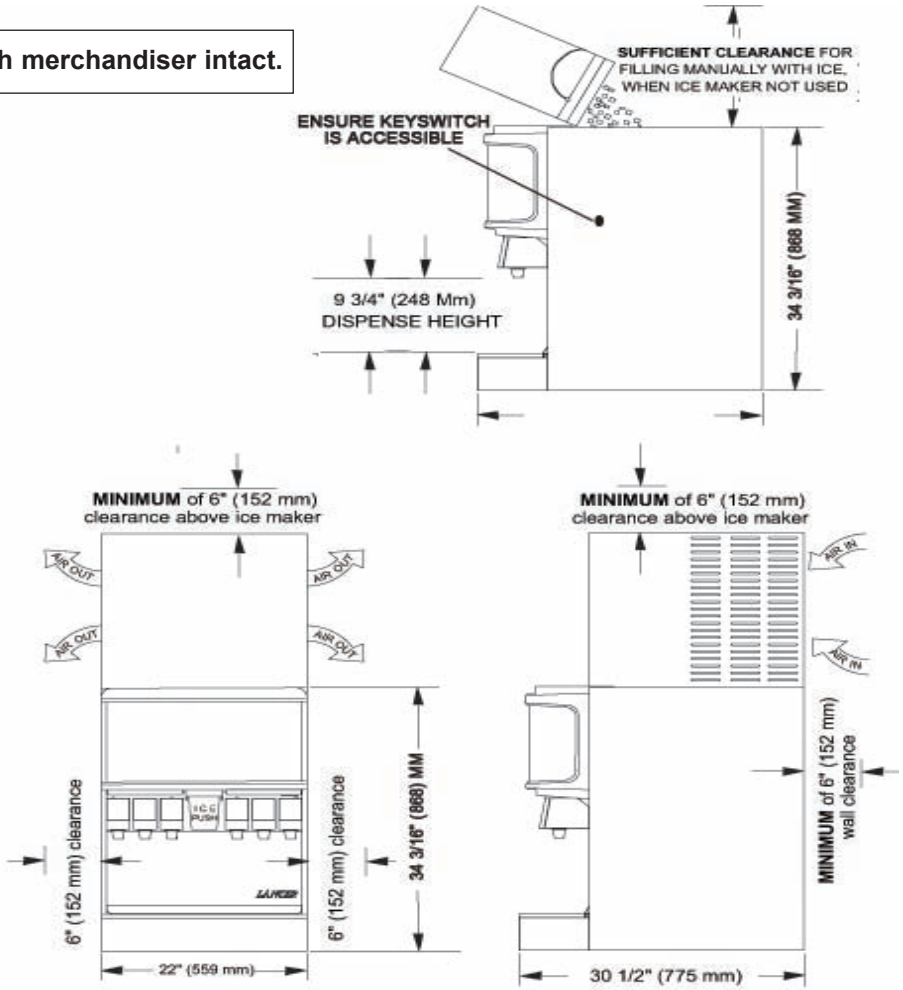

SUFFICIENT CLEARANCE FOR FILLING MANUALLY WITH ICE, WHEN ICE MAKER NOT USED
ENSURE KEYSWITCH IS ACCESSIBLE
9 3/4" (248 Mm) DISPENSE HEIGHT
34 3/16" (868 MM)
MINIMUM of 6" (152 mm) clearance above ice maker
AIR OUT
AIR OUT
AIR OUT
AIR OUT
6" (152 mm) clearance
6" (152 mm) clearance
34 3/16" (868) MM
22" (559 mm)
MINIMUM of 6" (152 mm) clearance above ice maker
AIR IN
AIR IN
MINIMUM of 6" (152 mm) wall clearance
30 1/2" (775 mm)

FIGURE 3. SELECTING A LOCATION - 22" IBD UNIT DISPLAYED (NO ICEMAKER)

IBD DISPENSER WITH ICEMAKER

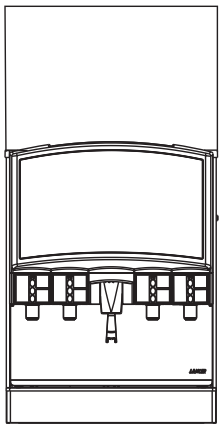


FIGURE 4

Install the icemaker per manufacturer specifications. Points of consideration include drainage, ventilation, and drop zones.

An adapter plate is required when installing an icemaker. Contact your Sales Representative or Lancer Customer Service for more information.

A bin thermostat is required in order to control the level of ice in the dispenser. Contact your icemaker manufacturer to obtain the correct bin thermostat.

Ensure the icemaker is installed properly to allow for removal of the merchandiser.

Ensure manual fill is accessible.

Clean and maintain icemaker per manufacturer's instructions.

1.4 LEVELING THE DISPENSER

In order to facilitate proper dispenser drainage and carbonation, ensure that the dispenser is level, front to back and side to side. Place a level on the top of the rear edge of the dispenser. The bubble must settle between the level lines (Fig 5**).** Repeat this procedure for the remaining three sides. Level unit if necessary. For optimum performance place the unit at a 0 degree tilt. The maximum tilt is 5 degrees.

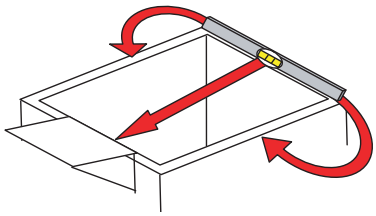


FIGURE 5

1.5 CONNECTING TO WATER SUPPLY LINES

NOTE: In addition to the following WATER NOTICE, adhere to the WATER SUPPLY Warnings and Cautions, Page 6.

WATER NOTICE

For the plain water supply line, the inlet water flowing pressure should be at least 75 PSI (517.11 kPa). If the water pressure is lower than 75 PSI (517.11 kPa) flowing, use a water booster system.

If the water flowing pressure is lower than 75 PSI (517.11 kPa) at the plain water inlet and a water booster is NOT installed, water products will not hold a proper flow rate or water/syrup ratio. Flow conditions at the nozzle can also be affected, causing poor nozzle coning and mixing.

For the soda water supply line, do not exceed 50 PSI (137.9 kPa) for the inlet water static pressure going into the carbonator pump. If the static water pressure exceeds 50 PSI (137.9 kPa), install a water regulator before the carbonator water inlet.

The Lancer Water Booster/Tank (PN MC-163172) is offered as a kit. The water booster must be installed as close as possible to the plain water circuit inlet.

Install the water regulator (Lancer PN 18-0306) included with unit as close as possible to the water carbonator pump inlet. The recommended water pressure value feeding the carbonator is a minimum of 25 PSI 172.37 kPa). If the normal water pressure does not exceed 50 PSI (137.9 kPa), but fluctuates over this value (for example, when water usage on other equipment connected to the same water supply causes pressure spikes), use a water regulator.

1.6 CONNECTING A CARBONATOR

A. If carbonator is not installed, install per manufacturer's instructions.

⚠ CAUTION/PRECAUCIÓN/ATTENTION ⚠

FAILURE TO DISCONNECT THE MOTOR POWER SUPPLY WILL DAMAGE THE CARBONATOR MOTOR, THE PUMP AND VOID THE WARRANTY. ⚠ SI NO DESCONECTA LA ALIMENTACIÓN ELÉCTRICA DEL MOTOR PODRÍAN DAÑARSE LA BOMBA Y EL MOTOR DEL CARBONATADO Y ANULAR LA GARANTÍA. ⚠ LE FAIT DE NE PAS MAINTENIR LE DÉGAGEMENT SPÉCIFIÉ FERA SURCHAUFFER LE COMPRESSEUR ET AURA COMME CONSÉQUENCE UNE DÉFAILLANCE DU COMPRESSEUR.

1.7 CONNECTING TO ELECTRICAL POWER

NOTE: In addition to the following, adhere to the **ELECTRICAL WARNINGS AND CAUTIONS,** PAGE 6.

⚠ WARNING/ADVERTENCIA/EXIGENCES ⚠
GROUNDING/PUESTA A TIERRA/DE MISE À LA TERRE

THE DISPENSER MUST BE PROPERLY ELECTRICALLY GROUNDED TO AVOID SERIOUS INJURY OR FATAL ELECTRICAL SHOCK. THE POWER CORD HAS A THREE-PRONG GROUNDED PLUG. IF A THREE-HOLE GROUNDED ELECTRICAL OUTLET IS NOT AVAILABLE, USE AN APPROVED METHOD TO GROUND THE UNIT. FOLLOW ALL LOCAL ELECTRICAL CODES WHEN MAKING CONNECTIONS. EACH DISPENSER MUST HAVE A SEPARATE ELECTRICAL CIRCUIT. DO NOT USE EXTENSION CORDS. DO NOT CONNECT MULTIPLE ELECTRICAL DEVICES ON THE SAME OUTLET. ⚠ ES NECESARIO PONER A TIERRA ELÉCTRICAMENTE EL DISPENSADOR PARA EVITAR LESIONES GRAVES E INCLUSO ELECTROCHOQUES FATALES. EL CABLE DE ALIMENTACIÓN TIENE UN ENCHUFE PUESTO A TIERRA DE 3 CLAVIJAS. SI NO SE DISPONE DE UN TOMA ELÉCTRICO CONECTADO A TIERRA DE TRES AGUJEROS, USE UN MÉTODO APROBADO PARA PONER A TIERRA LA UNIDAD. AL HACER LAS CONEXIONES, RESPETE TODOS LOS CÓDIGOS ELÉCTRICOS LOCALES. CADA DISPENSADOR DEBE TENER UN CIRCUITO ELÉCTRICO INDEPENDIENTE. NO USE CABLES DE EXTENSIÓN. NO CONECTE VARIOS DISPOSITIVOS ELÉCTRICOS AL MISMO TOMA CORRIENTE. ⚠ LA DISTRIBUTRICE DOIT ÊTRE MISE À LA TERRE ÉLECTRIQUEMENT CORRECTEMENT POUR ÉVITER DES BLESSURES GRAVES OU UNE DÉCHARGE ÉLECTRIQUE MORTELLE. LE CORDON D'ALIMENTATION A UNE FICHE À TROIS BRANCHES MISE À LA TERRE. SI AUCUNE PRISE DE COURANT ÉLECTRIQUE À TROIS TROUS N'EST DISPONIBLE, UTILISEZ UNE MÉTHODE APPROUVÉE POUR METTRE L'UNITÉ À LA TERRE. RESPECTEZ TOUS LES CODES ÉLECTRIQUES LOCAUX LORSQUE VOUS FAITES DES CONNEXIONS. CHAQUE DISTRIBUTRICE DOIT AVOIR UN CIRCUIT ÉLECTRIQUE SÉPARÉ. N'UTILISEZ PAS DE CORDONS PROLONGATEURS. NE BRANCHEZ PAS PLUSIEURS APPAREILS ÉLECTRIQUES À LA MÊME PRISE DE COURANT.

A. Check the dispenser serial number plate for correct electrical requirements of unit. *Do not plug into wall electrical outlet unless the current shown on the serial number plate agrees with local current available.*

CONTINUED ON NEXT PAGE

1.8 INSTALLATION OF THE UNIT

A. Remove Splash Plate and Top Cover.

B. Remove Cover Plate at rear of unit if not a “through the counter” installation.

C. Connect soda and water supply lines to 3/8 inch barb fittings at the front of the unit. Check for leaks. (If dispenser is to operate with all soda valves, connect water line into one of the soda supply lines.)

D. Connect syrup supply lines to the 3/8 inch barb inlet fittings at the front of the unit. Check for leaks.

E. Install the ice bin drain hose; connect the 90° elbow or straight fitting underneath the unit’s base. The ice bin drain is located towards the front of the bin and slightly to the right. Connect the hose. Extend the hose to an open type drain.

F. Connect the hose to the Drip Tray fitting, install the Drip Tray, and extend hose to open type drain.

G. Both drain lines must be insulated with a closed cell insulation. Insulation must cover the entire length of the drain hose, including fittings. *The drain should be installed in such a manner that water does not collect in sags or other low points, as condensation will form.*

H. Install Cup Rest and Splash Plate.

I. Connect Power Cord to grounded electrical outlet.

J. Test Motor operation by pushing Ice Chute.

K. Clean and sanitize dispenser (refer to Section 3).

L. Fill unit approximately half full with ice. Push Chute and check for ice delivery.

M. Finish filling the unit with ice and install Top Cover.

N. Set brix ratio for beverage dispensing valves according to manufacturer’s instructions.

⚠ WARNING/ADVERTENCIA/AVERTISSEMENT ⚠

WHEN INSTALLING AN ICEMAKER ON THE DISPENSER, USE A BIN THERMOSTAT TO CONTROL THE ICE LEVEL (SEE BELOW). THIS WILL PREVENT DAMAGE TO THE DISPENSING MECHANISM. THE BRACKET FOR MOUNTING A THERMOSTAT IS LOCATED IN THE ICE BIN. DURING THE AUTOMATIC AGITATION CYCLE AND WHILE DISPENSING ICE, ENSURE THERE IS ADEQUATE SPACE BETWEEN THE TOP OF THE ICE LEVEL AND THE BOTTOM OF THE ICEMAKER SO THE ICE CAN MOVE WITHOUT OBSTRUCTION. CONTACT YOUR ICEMAKER MANUFACTURER FOR INFORMATION ON A SUITABLE BIN THERMOSTAT.

⚠ CUANDO INSTALA UNA MÁQUINA DE CUBITOS EN EL DISPENSADOR, USE UN TERMOSTATO DE RECIPIENTE PARA CONTROLAR EL NIVEL DE HIELO (VER MÁS ABAJO). DE ESTA FORMA SE EVITAN LOS DAÑOS AL MECANISMO DISPENSADOR. EL SOPORTE PARA MONTAR EL TERMOSTATO ESTÁ EN EL RECIPIENTE DEL HIELO. DURANTE EL CICLO AUTOMÁTICO DE AGITACIÓN Y CUANDO SE DISPENSA HIELO, ASEGÚRESE DE QUE HAYA ESPACIO ADECUADO ENTRE LA PARTE SUPERIOR DEL NIVEL DE HIELO Y LA PARTE INFERIOR DE LA MÁQUINA DE CUBITOS, DE MODO QUE EL HIELO SE MUEVA SIN OBSTRUCCIONES. COMUNÍQUESE CON EL FABRICANTE DE SU MÁQUINA DE CUBITOS PARA OBTENER INFORMACIÓN SOBRE UN TERMOSTATO DE RECIPIENTE ADECUADO.

⚠ LORS DE L’INSTALLATION D’UN APPAREIL À CUBES DE GLACE SUR LE DISTRIBUTEUR, UTILISEZ UN THERMOSTAT DE BAC POUR CONTRÔLER LE NIVEAU DE GLACE (VOIR CI-DESSOUS). CECI EMPÊCHERA LES DOMMAGES AU MÉCANISME DE DISTRIBUTION. LE SUPPORT POUR FIXER UN THERMOSTAT SE TROUVE DANS LE BAC DE GLACE. PENDANT LE CYCLE D'AGITATION AUTOMATIQUE ET LORS DE LA DISTRIBUTION DE LA GLACE, ASSUREZ-VOUS QU’IL Y A ASSEZ D’ESPACE ENTRE LE DESSUS DU NIVEAU DE GLACE ET LE FOND DE L'APPAREIL À CUBES DE GLACE, POUR QUE L’APPAREIL À CUBES DE GLACE PUISSE BOUGER SANS OBSTRUCTION. CONTACTEZ VOTRE FABRICANT D'APPAREILS À CUBES DE GLACE POUR OBTENIR DES INFORMATIONS SUR UN THERMOSTAT DE BAC APPROPRIÉ.

CONTINUED ON NEXT PAGE

1.9 LCD INSTALLATION

If the monitor is not powered on, remove the merchandiser from the unit.

A. Remove the four (4) screws on the sides and lifting the merchandiser off and set aside.
B. Check that the power cable plug is pushed all the way in the bottom of the monitor.
C. Push the monitor power button on the bottom right side until the button is lit.
D. Replace the merchandiser and the 4 screws
E. Connect VGA cable with data source. Turn on data device.

1.10 ADJUSTING THE ICE FLOW REGULATOR FOR OPTIONAL AFTERMARKET KIT 82-3949/012 (FIGURE 6)

The Regulator Door Assembly (PN 82-2904) can regulate the dispensed ice flow. Installation of an Ice Flow Regulator is NOT necessary for the dispensing of ice. This IBD unit will dispense ice unrestricted. If the monitor is not installed, remove LCD.

A. Remove Bin Lids.
B. Adjust Ice Regulator to desired position by turning the nut screw clockwise to close, or counter clockwise to open, with the use of a nut driver or a socket wrench (Figure 6). **NOTE: Total adjustment: 1/2 inch.**
C. Reinstall bin lids.

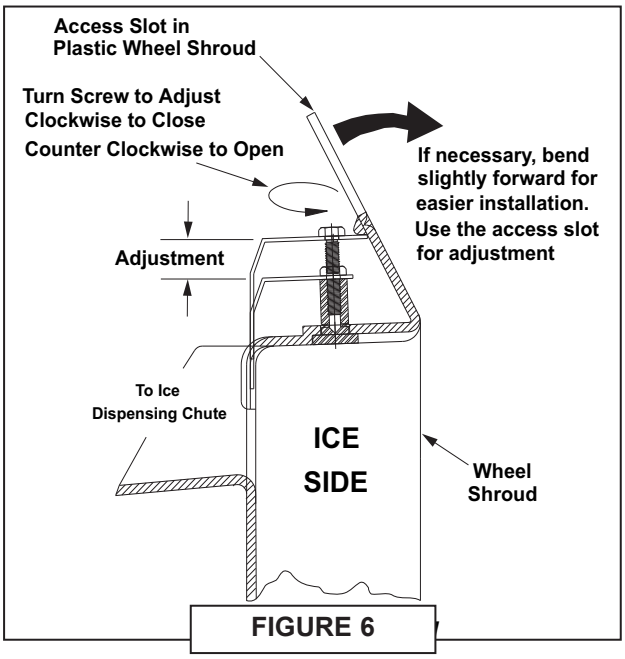


FIGURE 6

1.11 OTHER

Pouring hot water into drain may cause the drain tube to collapse. Allow only luke warm or cold water to enter the drain tube. Pouring coffee, tea, and similar substances may cause clog the drain tube.

2. INSTALLATION OF VALVES (LMV, *LEV*® OR VOLUMETRIC)

2.1 Model 100 Valves are factory preset for a flow rate of 3.0 ounces per second; an adjustment may be required.

2.2 Model 145 Factory preset for a flow rate of 4.5 ounces per second; an adjustment may be required.

2.3 Model 150 (Volumetric) Valves are preset for flows rates of 1.5 oz/sec, 2.25 oz/sec or 3.0 oz/sec based on valve part number. A hand held programmer (Lancer PN 52-1420/02) is required to set ratio on Volumetric Valves. Refer to Lancer web site (Installation Manuals 28-0027 for LMV/LEV valves and 28-0301 for Volumetric valves) for information on the following: Installation, Setting Flow Rate, Setting Ratio, Cleaning, Sanitizing, and Troubleshooting,

3. CLEANING AND SANITIZING INSTRUCTIONS

GENERAL INFORMATION

A. The cleaning and sanitizing procedures provided herein pertain to the Lancer equipment identified by this manual. If other equipment is being cleaned, follow the guidelines established by the manufacturer for that equipment.

B. Lancer equipment (new or reconditioned) is shipped from the factory cleaned and sanitized in accordance with NSF guidelines. The equipment must be cleaned and sanitized after installation is complete. The operator of the equipment must provide continuous maintenance as required by this manual and state and local health department guidelines to ensure proper operation and sanitation requirements are maintained.

C. Cleaning and sanitizing should be accomplished only by trained personnel. Sanitary gloves are to be used during cleaning and sanitizing operations. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.

D. Other Required Supplies: 1) Clean cloth towels, 2) bucket, 3) extra nozzle, 4) sanitary gloves and 5) Small brush (PN 22-0017 included with installation kit).

USE SANITARY GLOVES.
OBSERVE APPLICABLE SAFETY PRECAUTIONS.

- **DO NOT USE A WATER JET TO CLEAN OR SANITIZE THE UNIT**
- **DO NOT DISCONNECT WATER LINES WHEN CLEANING AND SANITIZING SYRUP LINES, TO AVOID CONTAMINATION.**
- **DO NOT USE STRONG BLEACHES OR DETERGENTS; THESE CAN DISCOLOR AND CORRODE VARIOUS MATERIALS.**
- **DO NOT USE METAL SCRAPERS, SHARP OBJECTS, STEEL WOOL, SCOURING PADS, ABRASIVES, OR SOLVENTS ON THE DISPENSER.**
- **DO NOT USE HOT WATER ABOVE 140º F (60º C). THIS CAN DAMAGE THE DISPENSER.**
- **DO NOT SPILL SANITIZING SOLUTION ON ANY CIRCUIT BOARDS. INSURE ALL SANITIZING SOLUTION IS REMOVED FROM THE SYSTEM.**

3.1 CLEANING SOLUTION

Mix a mild, non-abrasive detergent (e.g. Sodium Laureth Sulfate, dish soap) with clean, potable water at a temperature of 90 to 110°F (32 to 43°C). The mixture ratio is one ounce of cleaner to two gallons of water. Prepare a minimum of five gallons of cleaning solution. Do not use abrasive cleaners or solvents because they can cause permanent damage to the unit. Ensure rinsing is thorough, using clean, potable water at a temperature of 90 to 110 degrees F. Extended lengths of product lines may require additional cleaning solution.

3.2 SANITIZING SOLUTION

Prepare sanitizing solutions in accordance with the manufacturer's written recommendations and safety guidelines. The solution must provide 50 to 100 parts per million (PPM) chlorine (e.g. Sodium Hypochlorite or bleach). A minimum of five gallons of sanitizing solution should be prepared. Any sanitizing solution may be used as long as it is prepared in accordance with the manufacturer's written recommendations and safety guidelines, and provides 50 to 100 parts per million (PPM) chlorine.

CONTINUED ON NEXT PAGE

⚠ CAUTION/PRECAUCIÓN/ATTENTION/ ⚠

FOLLOWING SANITIZATION, RINSE WITH END-USE PRODUCT UNTIL THERE IS NO AFTERTASTE. DO NOT USE A FRESH WATER RINSE. THIS IS A NSF REQUIREMENT. RESIDUAL SANITIZING SOLUTION LEFT IN THE SYSTEM CREATES A HEALTH HAZARD. ⚠ DESPUÉS DE LA ESTERILIZACIÓN, ENJUAGUE CON EL PRODUCTO FINAL HASTA QUE ELIMINAR EL SABOR QUE QUEDA. NO ENJUAGUE CON AGUA FRESCA. ÉSTA ES UNA EXIGENCIA DE NSF. SI QUEDA SOLUCIÓN DE ESTERILIZACIÓN EN EL SISTEMA, GENERA UN PELIGRO PARA LA SALUD. ⚠ DÉFENSE DE RINCER L'OUTIL À L'EAU FRAICHE IMMÉDIATEMENT APRÈS UN TRAITEMENT SEPTIQUE.EN CAS DE APRÈS-GOÛT, NE PURGER AVEC LE PRODUIT FINAL UNE EXIGENCE NSF.

3.3 DAILY CLEANING

A. Using the cleaning solution, clean Top Cover and all exterior stainless steel surfaces.
B. Clean exterior of dispensing valves and ice chute.
C. Remove Cup Rest, clean Drip Tray and Cup Rest, and replace Cup Rest.
D. Wipe clean all splash areas using a damp cloth soaked in cleaning solution.
E. Clean beverage valves as specified by the valve manufacturer.

3.4 CLEANING LCD MONITOR

To clean your antistatic screen, lightly dampen a soft, clean cloth with water. If possible, use a special screen-cleaning tissue or solution suitable for the antistatic coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air. See CD under Maintenance Guidelines for further info on maintenance of your monitor.

3.5 CLEANING MERCHANDISER LENS

A. Wash the lens with lukewarm water containing a neutral detergent using a soft sponge, a wool cloth or a chamois.
B. Rinse with water and dry with a soft cloth.

3.6 ICE BIN CLEANING - PERFORM AT STARTUP AND MONTHLY

⚠ WARNING/AVERTISSEMENT ⚠

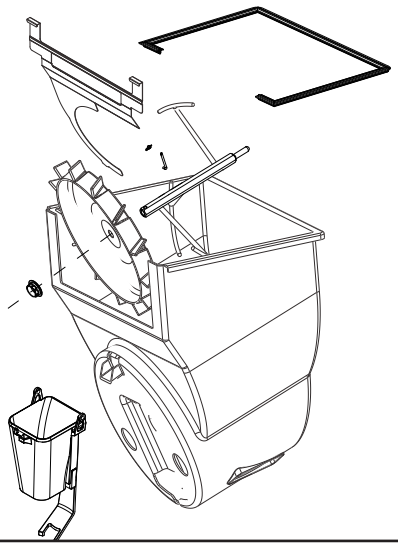
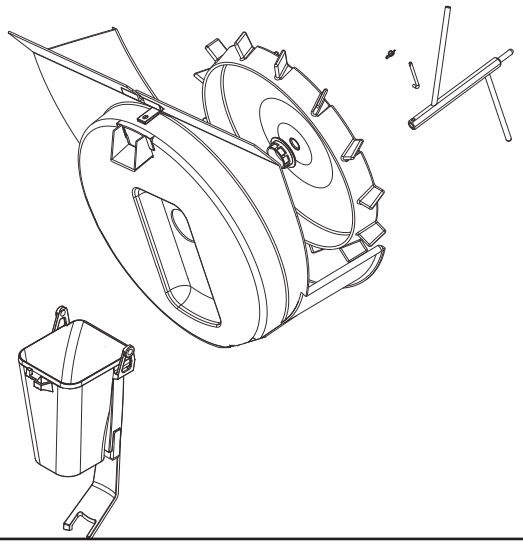
THE BIN AGITATION SYSTEM WILL OPERATE AUTOMATICALLY. DO NOT PLACE HANDS IN THE BIN OR THE ICE CHUTE. UNPLUG DISPENSER FROM THE POWER SOURCE, WHEN UNIT IS BEING SERVICED, CLEANED OR SANITIZED. ⚠ EL SISTEMA DE AGITACIÓN DEL RECIPIENTE FUNCIONA AUTOMÁTICAMENTE. NO PONGA LAS MANOS EN EL RECIPIENTE NI EN LA CAÍDA DEL HIELO. CUANDO SE REALIZAN TAREAS DE SERVICIO, LIMPIEZA O ESTERILIZACIÓN, DESENCHUFE EL DISPENSADOR DE LA ALIMENTACIÓN DE CORRIENTE ⚠ LE SYSTÈME D'AGITATION DU RÉCIPIENT FONCTIONNERA AUTOMATIQUEMENT. NE PLACEZ PAS LES MAINS DANS LE RÉCIPIENT OU LA DESCENTE DE GLACE. DÉBRANCHEZ LE DISTRIBUTEUR DE LA SOURCE D'ALIMENTATION EN ÉLECTRICITÉ QUAND L'UNITÉ EST ENTRETENUE, NETTOYÉE OU ASEPTISÉE.

A. Disconnect power to the dispenser
B. Remove Top Cover.
C. Melt out any remaining ice from the bin.
D. Remove Agitator Pin from Agitator Shaft. Slide Agitator Shaft rearward out of Motor Shaft and pull out of rear Bearing to remove.
E. Remove Dispensing Wheel from Motor Shaft by sliding rearward.

CONTINUED ON NEXT PAGE

3.6 ICE BIN CLEANING - PERFORM AT STARTUP AND MONTHLY - CONTINUED

F. Remove Dispensing Wheel Shroud.

WHITE WHEEL SHROUD (PELLET ICE)	BLACK WHEEL SHROUD (CUBED ICE)
	
1. Remove the gasket which secures the shroud by pulling it out. 2. Push the front section of the shroud back. 3. Pull the shroud up and out. 4. Remove the lower ice chute assembly.	1. Remove the dispensing wheel shroud. 2. Remove the lower ice chute assembly.

G. Remove Splash Plate Assembly by lifting it up and out from the dispenser face.

H. Use the Cleaning Solution described in Section 3.1, and a clean cloth or soft brush, to clean all removable parts, sides of Ice Bin, Ice Chute, and surface of aluminum casting.

I. Repeat Step H for all exterior surfaces of the dispenser.

J. Using hot water, thoroughly rinse away the cleaning solution.

K. Wearing sanitary gloves, soak a clean cloth towel in Sanitizing Solution, described in Section 3.2, and wash all surfaces of removable parts, sides of Ice Bin, Ice Chute, and surface of aluminum casting.

L. Repeat Step I for all metal and plastic surfaces (***not labels***) of the dispenser exterior.

M. Wearing sanitary gloves, reassemble all removable parts. Ensure agitator clip is locked (See Fig 2, Section 1.2).

N. Fill Unit with ice and replace Top Cover.

O. Reconnect Dispenser to power source.

3.7 CLEANING AND SANITIZING BEVERAGE COMPONENTS - BAG-IN-BOX SYSTEMS

NOTE: Extended lengths of product lines may require more time for flushing and rinsing lines than described below.

A. Disconnect the syrup quick disconnect coupling from the syrup packages and connect the coupling to a bag valve removed from an empty Bag-in-Box (BIB) package.

B. Place the syrup inlet line in a clean container filled with clean, potable, room temperature water. Activate the valve until water is dispensed. Flush and rinse the line and fittings for a minimum of sixty seconds to remove all traces of residual product.

C. Make the sanitizing solution. Place the syrup inlet line in a container filled with sanitizing solution.

CONTINUED ON NEXT PAGE

3.7 CLEANING AND SANITIZING BEVERAGE COMPONENTS - BAG-IN-BOX SYSTEMS - CONTINUED

D. Activate the valve and draw sanitizing solution through the line for a minimum of sixty seconds. This will ensure the line is flushed and filled with sanitizing solution. Allow the line to stand for at least thirty minutes.

E. Remove the bag valve from the quick disconnect coupling and reconnect the syrup inlet line to syrup package. Ready the unit for operation.

F. Draw drinks to refill the lines and to flush the sanitizing solution from the dispenser.

⚠ **CAUTION/PRECAUCIÓN/ATTENTION/** ⚠

FOLLOWING SANITIZATION, RINSE WITH END-USE PRODUCT UNTIL THERE IS NO AFTERTASTE. DO NOT USE A FRESH WATER RINSE. THIS IS A NSF REQUIREMENT. RESIDUAL SANITIZING SOLUTION LEFT IN THE SYSTEM CREATES A HEALTH HAZARD. ⚠ DESPUÉS DE LA ESTERILIZACIÓN, ENJUAGUE CON EL PRODUCTO FINAL HASTA QUE ELIMINAR EL SABOR QUE QUEDA. NO ENJUAGUE CON AGUA FRESCA. ÉSTA ES UNA EXIGENCIA DE NSF. SI QUEDA SOLUCIÓN DE ESTERILIZACIÓN EN EL SISTEMA, GENERA UN PELIGRO PARA LA SALUD. ⚠ DÉFENSE DE RINCER L'OUTIL À L'EAU FRAICHE IMMÉDIATEMENT APRÈS UN TRAITEMENT SEPTIQUE.EN CAS DE APRÈS-GOÛT, NE PURGER AVEC LE PRODUIT FINAL UNE EXIGENCE NSF.

G. Test the dispenser for proper operation. Taste the dispensed product to ensure there is no off-taste. If off-taste is found, flush the syrup system again.

H. Repeat cleaning, rinsing, and sanitizing procedures for each valve and circuit.

3.8 ICE CHUTE CLEANING

It is recommended to perform this procedure monthly, or more often if desired. Use the cleaning solution described above. An alternate solution of one part water to one part vinegar may be used to remove water spots and calcium deposits.

A. Turn off power to the dispenser.

B. Remove merchandiser.

C. Unhook the spring from the upper ice chute by pulling up and out.

D. Remove the lower chute by carefully spreading apart the arms of the lower chute.

E. Mix the cleaning solution. Put a portion of the solution into a spray bottle. Soak the lower chute in the remaining solution.

F. Spray the upper chute with the cleaning solution.

G. With a soft sponge, clean the inside of the upper and lower chutes.

H. Rinse the lower chute thoroughly.

I. Dry the lower chute thoroughly.

J. Empty the cleaning solution from the spray bottle, then refill with plain water. Rinse the upper chute thoroughly.

K. Dry the upper chute.

L. Reinstall the lower ice chute onto the upper chute, then reinstall the spring.

M. Reinstall merchandiser.

N. Reconnect power to the dispenser.

3.9 REMOVAL OF MONITOR FOR SERVICE

A. Turn power off to dispenser

B. Remove merchandiser

C. Loosen the four (4) wing nuts on the side of monitor bracket

D. Lift monitor/bracket by grasping the side of the monitor and lifting up

CONTINUED ON NEXT PAGE

3.9 REMOVAL OF MONITOR FOR SERVICE - CONTINUED

E. Rotate the monitor/bracket clockwise. Set the right side of the bracket on top of the drip tray and lean the top of the bracket on the front of the unit.

F. Complete service.

G. Reverse the process to install the monitor/bracket on the unit.

3.10 MONITOR WARRANTY

A. All monitor warranty claims should be processed through Lancer Corporation. Do not send claims directly to Dell. Monitor troubleshooting guide can be found on the Dell supplied CD.

B. Abrasions to the monitor due to improper cleaning method's or due to use of abrasives are not covered by the limited warranty.

C. Damage during shipment should be forwarded back to the carrier and not the supplier.

D. Spillage of liquid on to the monitor is not covered under the limited warranty.

E. Voltage issues as a result of power spikes or irregular line voltage is not covered under the limited warranty.

4. TROUBLESHOOTING

TROUBLE	CAUSE	REMEDY
4.1 No product when switch is activated (switch panel is not lit).	A. Malfunctioning switch assembly. B. No power to dispenser. C. Malfunctioning power supply. D. Malfunctioning PCB board.	A. Replace switch assembly. B. Check internal breaker and incoming power. C. Check voltage to power supply. Check fuses. D. Replace PCB board.
4.2 No product when switch is activated (switch panel is lit).	A. Keyswitch is off or keyswitch harness is disconnected. B. Malfunctioning switch assembly. C. Malfunctioning LFCV module.	A. Turn keyswitch on and/or reconnect keyswitch harness. B. Replace switch assembly. C. Replace module.
4.3 Push chute; no response.	A. Dispenser not connected to power source. B. Microswitch defective. C. Wiring harness not plugged in. D. PC board defective. E. Malfunctioning power supply.	A. Connect dispenser to power source. B. Replace microswitch. C. Plug in wiring harness. D. Replace PC board. E. Check voltage to power supply. Check fuses.
4.4 Push chute. Ice door opens but motor does not run.	A. Wiring harness not plugged in. B. PC board defective. C. Motor defective.	A. Plug in wiring harness. B. Replace PC board. C. Replace motor.
4.5 Push chute. Motor runs but ice door does not open.	A. Solenoid not connected to PC board. B. Solenoid defective. C. PC board defective.	A. Connect solenoid to PC board. B. Replace solenoid. C. Replace PC board.
4.6 Push chute, ice door opens, motor runs, but ice does not dispense, or ice is of poor quality.	A. Dispenser is out of ice. B. Agitator pin is missing or damaged. C. Poor ice quality.	A. Fill dispenser with ice. B. Replace agitator pin. C. Service ice machine.

CONTINUED ON NEXT PAGE

TROUBLE	CAUSE	REMEDY
4.7 Water in ice bin.	A. Coldplate drain is obstructed.	A. Remove splash plate to obtain access to drain tubes and clear accordingly.
4.8 Water leakage around nozzle.	A. Damaged or improperly installed o-ring on nozzle.	A. If damaged, replace. If improperly installed, adjust.
4.9 Miscellaneous leakage.	A. Gap between parts. B. Damaged or improperly installed o-rings.	A. Tighten appropriate retaining screws. B. Replace or adjust appropriate o-rings.
4.10 Noisy/cavitating carbonator pump.	A. Insufficient incoming water supply pressure.	A. Verify incoming supply water pressure to carbonator pump is a minimum of 25 PSI, maximum of 50 PSI.
4.11 Insufficient soda flow (carbonated drinks).	A. Insufficient CO2 supply pressure. B. Shutoff on mounting block is not fully open. C. Foreign debris in soda flow control. D. Defective LFCV module.	A. Verify incoming CO2 pressure is between 70-75 PSI. B. Open shutoff fully. C. Remove soda flow control from valve and clean out any foreign material to ensure smooth spool movement. D. Replace module.
4.12 Insufficient water flow (plain water drinks).	A. Insufficient incoming supply pressure. B. Shutoff on mounting block not fully open. C. Foreign debris in water flow control. D. Water filtration problem. E. Defective LFCV module	A. Verify incoming supply water pressure to plain water inlet is a minimum of 75 PSI, maximum of 125 PSI. B. Open shutoff fully. C. Remove water flow control from valve and clean out any foreign material to ensure smooth spool movement. D. Service water system as required. E. Replace module.

CONTINUED ON NEXT PAGE

TROUBLE	CAUSE	REMEDY
4.13 Insufficient syrup flow.	A. Insufficient CO2 pressure to BIB pumps.	A. Adjust CO2 pressure to BIB pumps to 80 PSI (minimum 70 PSI). Do not exceed manufacturer's recommendations.
	B. Shutoff on mounting block not fully open.	B. Open shutoff fully.
	C. Foreign debris in syrup flow control.	C. Remove syrup flow control from valve and clean out any foreign material to ensure smooth spool movement.
	D. Defective BIB pump.	D. Replace pump.
	E. Defective LFCV module.	E. Replace module.
4.14 Erratic ratio.	A. Incoming water and/or syrup supply not at minimum flowing pressure.	A. Check pressure and adjust.
	B. Foreign debris in water and/or syrup flow control.	B. Remove flow control from suspected valve and clean out any foreign material to ensure smooth spool movement.
	C. CO2 regulator malfunction.	C. Repair or replace CO2 regulator.
4.15 Water only dispensed, no syrup. Or syrup only dispensed, no water.	A. Syrup BIB empty.	A. Replace syrup BIB as required.
	B. Water or syrup shutoff on mounting block not fully open.	B. Open shutoff completely.
	C. Improper or inadequate water or syrup supply.	C. Remove valve from mounting block and open shutoffs slightly. Check water and syrup supply. If no supply, check dispenser for other problems. Ensure BIB connection is engaged.
	D. CO2 pressure to syrup pump too low.	D. Check the CO2 pressure to the pump to ensure it is between 70-80 PSI.
	E. Stalled or inoperative BIB pump.	E. Check CO2 pressure and/or replace pump.
	F. Kinked line.	F. Remove kink or replace line.
	G. CO2 regulator malfunction.	G. Repair or replace CO2 regulator as required.
	H. Defective LFCV module.	H. Replace module.

CONTINUED ON NEXT PAGE

TROUBLE	CAUSE	REMEDY
4.16 Valve will not shut off.	A. Debris in solenoid seat.	A. Activate valve a few times to free debris. Remove the solenoid coil and plunger. Clean out any foreign material.
	B. Solenoid plunger sticking.	B. Replace solenoid coil.
4.17 Syrup only dispensed. No water, but CO2 gas dispensed with syrup.	A. Improper water flow to dispenser.	A. Check for water flow to dispenser.
	B. Carbonator pump motor has timed out (a message will be displayed on the LCD screen).	B. Reset by turning the unit OFF and then ON by using the circuit breaker on the power supply or momentarily unplugging unit.
	C. Liquid level probe not connected properly to PCB.	C. Check connections of liquid level probe to PCB assembly.
	D. Defective PCB assembly.	D. Replace PCB assembly.
	E. Defective liquid level probe.	E. Replace liquid level probe.
	F. Weak or defective carbonator pump.	F. Replace pump.
4.18 Excessive foaming.	A. No ice in bin.	A. Fill bin with ice and allow coldplate to re-stabilize.
	B. Incoming water or syrup temperature too high.	B. Correct prior to dispenser.
	C. CO2 pressure too high.	C. Adjust CO2 pressure downward, but not less than 70 PSI.
	D. Water flow rate too high.	D. Re-adjust and reset ratio.
	E. Nozzle and diffuser not clean.	E. Remove and clean.
	F. Air in BIB lines.	F. Bleed air from BIB lines.
4.19 Water continually leaking at connections.	A. Loose water connections.	A. Tighten water connections.
	B. Flare seal washer leaks.	B. Replace flare seal washer.

CONTINUED ON NEXT PAGE

TROUBLE	CAUSE	REMEDY
4.20 Circuit breaker tripping.	A. Valve wire harness shorted to itself or faucet plate.	A. Detect short by disconnecting valve harnesses from switch panel (4 25-pin harnesses and 4 9-pin harnesses). Restore power. If breaker does not trip, find and replace shorted harness. If breaker trips, re-install the 8 harnesses, and proceed to step B.
	B. Controller PCB is bad.	B. Detect by disconnecting the white 5-pin harness from the controller PCB. Restore power. If breaker does not trip, replace controller PCB. If breaker trips, re-install the white 5-in harness and proceed to step C.
	C. Secondary wire harness is shorted.	C. Locate short from a motor or solenoid harness and replace.
	D. Power supply is bad.	D. Detect short by disconnecting all harnesses connected to power supply. Restore power. If breaker still trips, replace power supply.
4.21 BIB pump does not operate when dispensing valve is opened.	A. Out of CO_2, CO2 not turned on, or low CO2 pressure.	A. Replace CO2 supply, turn on CO2 supply, or adjust CO2 pressure to 70-80 PSI.
	B. Out of syrup.	B. Replace syrup supply.
	C. BIB connector not tight.	C. Fasten connector tightly.
	D. Kinks in syrup or gas lines.	D. Straighten or replace lines.
4.22 BIB pump operating, but no flow.	A. Leak in syrup inlet or outlet line.	A. Replace line.
	B. Defective BIB pump.	B. Replace BIB pump.
4.23 BIB pump continues to operate when bag is empty.	A. Leak in suction line.	A. Replace line.
	B. Leaking o-ring on pump inlet fitting.	B. Replace o-ring
	C. Defective syrup BIB pump.	C. Replace defective pump.

CONTINUED ON NEXT PAGE

TROUBLE	CAUSE	REMEDY
4.24 BIB pump fails to restart after bag replacement.	A. BIB connector not on tightly. B. BIB connector is stopped up. C. Kinks in syrup line.	A. Tighten BIB connector. B. Clean out or replace BIB connector. C. Straighten or replace line.
4.25 BIB pump fails to stop when dispensing valve is closed.	A. Leak in discharge line or fittings. B. Empty BIB. C. Air leak on inlet line or bag connector.	A. Repair or replace discharge line. B. Replace BIB. C. Repair or replace.
4.26 Low or no carbonation.	A. Low or no CO_2. B. Low water pressure. C. Worn or defective carbonator pump. D. Backflow preventer not allowing water to flow. E. Probe malfunctioning. F. PCB malfunctioning.	A. Check CO2 supply. Adjust CO2 pressure to 70 PSI. B. Need water booster kit. C. Replace carbonator pump. D. Replace backflow preventer, noting the flow direction arrow from pump to coldplate. E. Replace probe. F. Replace PCB.

5. LIGHT EMITTING DIODES (LEDS)

Light Emitting Diodes (LEDs) are provided on the PC Board to aid in troubleshooting electrical difficulties. Referring to the wiring diagram included in this manual (also affixed to the electrical box cover), the following information in Section 5 can be obtained from the LEDs.

5.1 LED D3 - Light is on when the ice dispense switch is activated. If the chute is depressed and the light does not turn on, check to see if the wire harness is connected or if the dispense switch is defective.

5.2 LED D4 - Light is used on units with lid interlock switches. On the 4500 series ice-beverage dispenser, this light should always be lit. If it is not, check the Lid Interlock Jumper (black wire with 4 pin white connector).

5.3 LED D5 - Light is on when +5VDC is present at the circuit board. It should be lit whenever the unit is connected to a power source. If the light is off, check to see if the internal circuit breaker on the transformer was tripped. If it has tripped, it can be reset by depressing the switch on the top of the transformer.

5.4 LED D6 - This light is on when +32VDC is present at the circuit board. It should be lit whenever the unit is connected to a power source. If the light is off, check to see if the internal circuit breaker on the transformer has tripped. If it tripped, it can be reset by depressing the switch on the top of the transformer.

CONTINUED ON NEXT PAGE

5. LIGHT EMITTING DIODES (LEDS) - CONTINUED

5.5 LED D7 - Light flashes when there is no ice between the sensors in the ice bin. If the bin is empty and the light is not flashing, check all wiring harnesses.

5.6 LED D8 - Light is on when the solenoid is activated. When the chute is depressed, this light should turn on. If it does not, check to see if the solenoid leads are connected to the PC board are damaged, check continuity of solenoid. Replace if defective.

5.7 LED D9 - Light is on when the motor is activated. When the chute is depressed, this light should turn on. If it does not, check to see if the motor harness is connected to the PC board are damaged, check continuity of motor harness and motor. Replace if defective.

6. AUTOMATIC AGITATION AND LOW ICE ALARM CONTROL (NOT APPLICABLE FOR LCD UNITS)

Each Series 4500 ice beverage dispenser is equipped with automatic agitation for the ice bin. The unit is shipped with timing set at two (2) seconds ON every 60 minutes. Referring to the tables on the wiring diagram included in this manual (also affixed to the electrical box cover), the automatic agitation timing can be changed as follows. A set of DIP switches is provided to control the timing and low ice control.

6.1 DIP#1 - This switch controls the low ice indicator light. With the switch in the ON position, the light operates when a low ice condition exists. In the OFF position, the light is turned off. The unit is shipped with the light switch in the ON position.

6.2 DIP#2 - This switch controls the low ice audible alarm. With the switch in the ON position, the alarm operates when a low ice condition exists. In the OFF position, the alarm is turned off. The unit is shipped with the alarm switch in the OFF position.

6.3 DIP#3 & #4 - These switches control the ON time for automatic agitation. By referring to the table and setting the switches as shown, ON times from one (1) second to four (4) seconds [in one (1) second increments] can be obtained. EXAMPLE: For three (3) seconds ON time, switch 3 should be in the ON position, and switch 4 should be in the OFF position. *The unit is shipped with two (2) seconds ON time.*

Dispensers using pellet ice *must* have the automatic agitation settings adjusted to four (4) seconds ON every 150 minutes.

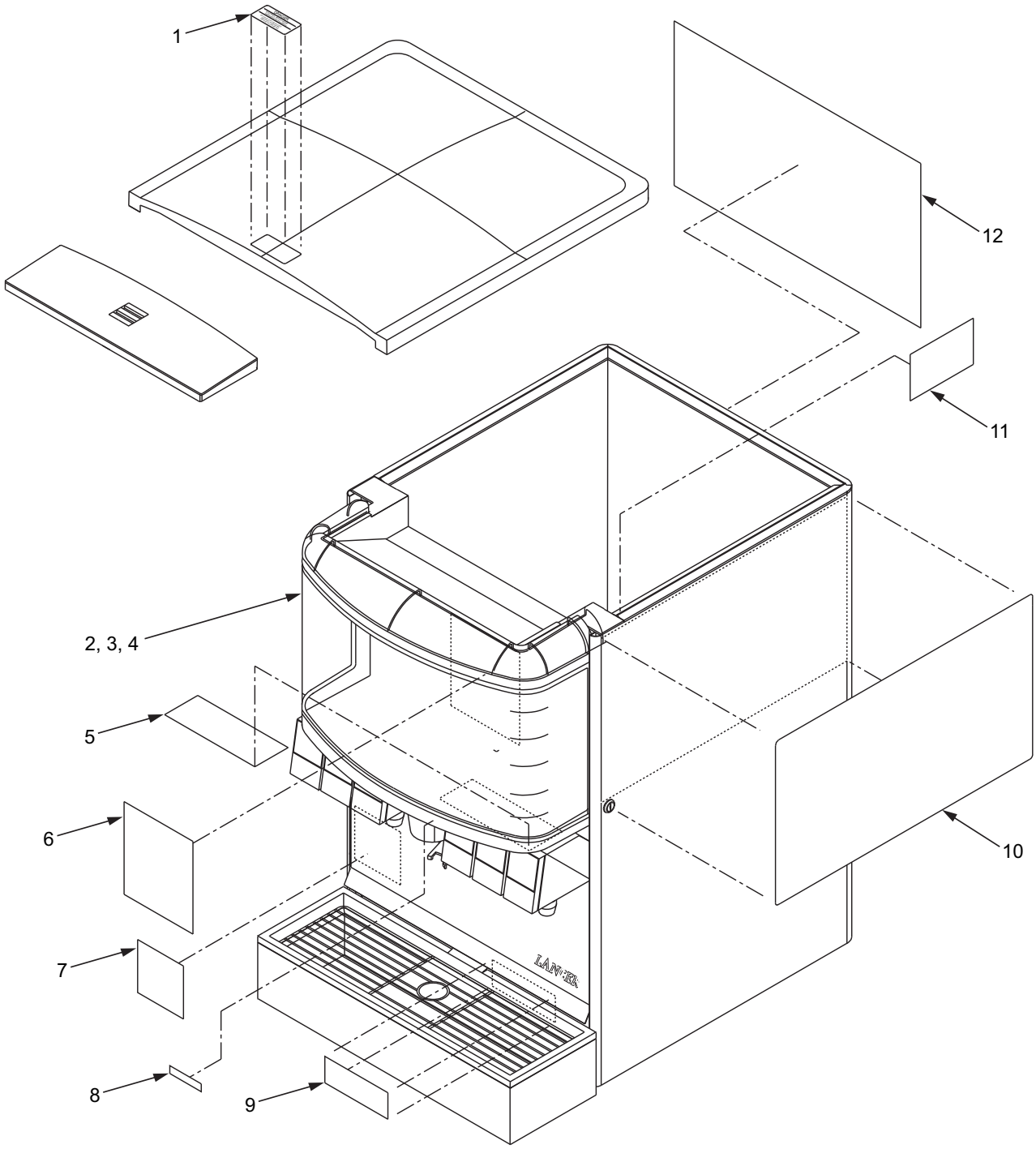
6.4 DIP#5 through #8

A. These switches control the OFF time for automatic agitation. By referring to the table and setting the switches as shown, OFF times from 10 minutes to 150 minutes (in 10 minute increments) can be obtained. EXAMPLE: For 40 minute OFF time, switch 5 should be in the OFF position, switch 6 should be in the ON position, switch 7 should be in the OFF position, and switch 8 should be in the OFF position. The unit is shipped with 60 minute OFF time.

B. To turn the agitation completely off, set switches 5 through 8 all OFF.

7. ILLUSTRATIONS AND PARTS LISTINGS

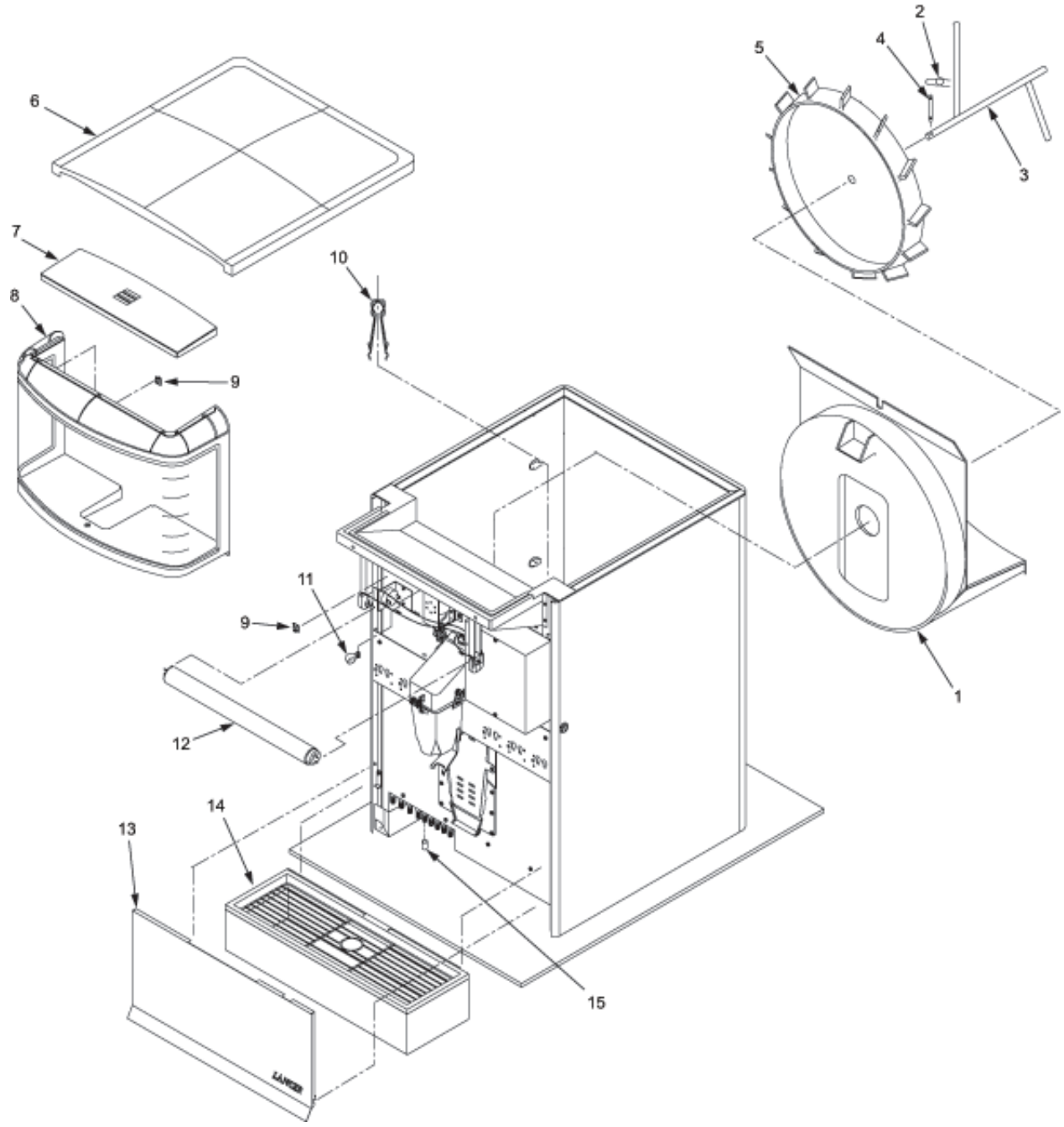
7.1 DECALS AND LABELS



7.1 DECALS AND LABELS (CONTINUED)

Item	Part No.	Description
-	85-4526H-100	IBD22H, Series 4500, 115V/60Hz, 6 ***LEV***®
-	85-4548H-100	IBD30H, Series 4500, 115V/60Hz, 8 ***LEV***®
-	85-4536H-100	IBD22H, Series 4500, 230V/50-60Hz, 6 ***LEV***®
-	85-4558H-100	IBD30H, Series 4500, 230V/50-60Hz, 8 ***LEV***®
-	85-4541H-100	IBD30H, Series 4500, 115V/60Hz, 10 ***LEV***®
1	06-1139	Label, Warning, Lid, IBD
2	06-2057/01	Panel, Graphic, IBD22, Round
-	06-2072/01	Panel, Graphic, IBD30, Round
3	27-0069	Diffuser Lens, IBD22
-	27-0070	Diffuser Lens, IBD30
4	27-0063	Clear Lens, IBD22
-	27-0064	Clear Lens, IBD30
5	06-1184/01	Label, Cleaning, Merchandiser
6	06-1182/04	Label, Wiring Diagram, 115V, IBD (See Section 7.8)
-	06-1521/02	Label, Wiring Diagram, 230V, IBD (See Section 7.10)
7	06-1181/02	Label, Plumbing Diagram, IBD22 (See Section 7.13)
-	06-2226	Label, Plumbing Diagram, IBD30 (See Section 7.14)
8	06-1522	Label, Low Ice, IBD
9	06-1207	Label, Cold Plate Cleaning, IBD
10	06-2058/01	Decal, Wrapper, Side, IBD, Round
11	06-1183	Decal, Cleaning, Hopper, IBD
12	06-2059/01	Decal, Wrapper, Back, IBD22, Round
-	06-2073/01	Decal, Wrapper, Back, IBD30, Round
-	12-0193	Ice Out Indicator

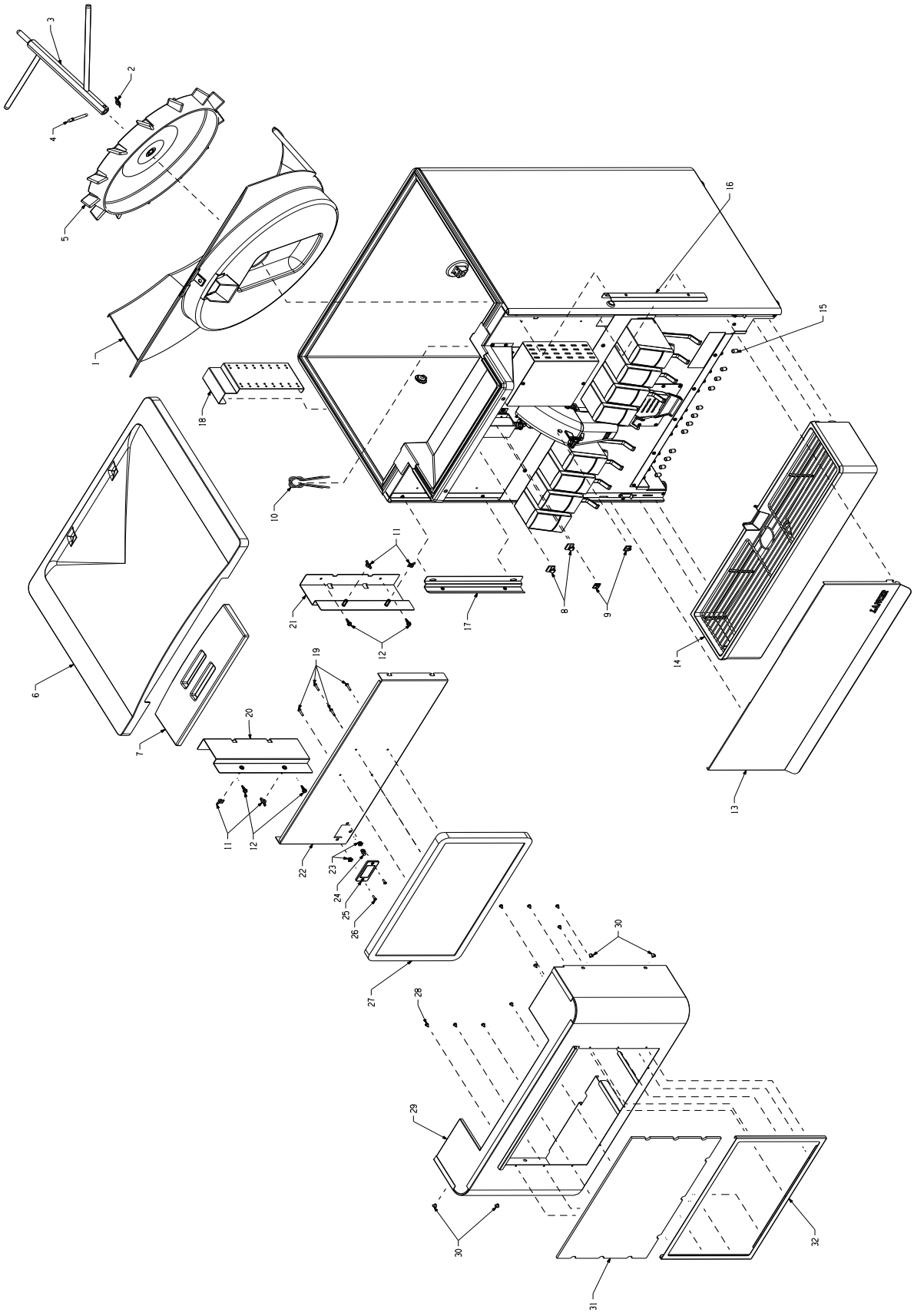
7.2 FINAL ASSEMBLY, POST-MIX IBD AND ICE DISPENSER



7.2 FINAL ASSEMBLY, POST-MIX IBD AND ICE DISPENSER (CONTINUED)

Item	Part No.	Description
-	85-4526H	IBD22H, Series 4500, 115V/60Hz,6 Valve
-	85-4548H	IBD30H, Series 4500, 115V/60Hz,8 Valve
-	85-4536H	IBD22H, Series 4500, 230V/50-60Hz,6 Valve
-	85-4558H	IBD30H, Series 4500, 230V/50-60Hz,8 Valve
-	85-4541H	IBD30H, Series 4500, 115V/60Hz,10 Valve
1	05-1309/02	Wheel Shroud, IBD22
-	82-1892/01	Wheel Shroud Assy, IBD22, Mod (230V ONLY)
-	05-1310/02	Wheel Shroud, IBD30
-	82-1893	Wheel Shroud Assy, IBD30, Mod (230V ONLY)
2	03-0368	Retainer, RUE-14-S
3	23-1373	Agitator Assy, HEX, IBD (115V)
-	23-1355	Agitator Assy, IBD (230V Only)
4	10-0762	Pin, Agitator, IBD, Single Retainer
5	82-3556	Dispensing Wheel Assy, HEX, IBD (115V)
-	82-3413	Dispensing Wheel Assy, IBD (230V Only)
6	05-1467	Lid, Back, IBD22, Round
-	05-1606	Lid, Back, IBD30, Round
7	05-1476	Lid, Front, IBD, Round
8	82-2630	Merchandiser Assy, IBD, 22 Inch, Round
-	82-2641	Merchandiser Assy, IBD, 30 Inch, Round
9	03-0300	Wire Clip, Adhesive
10	23-1038/01	Drain, Spider, IBD
11	03-0049	Clip, Cord
12	12-0146/01	Lamp, 18 Inch, 15W, T8
13	30-5951/03	Plate, Splash, IBD, 22 Inch Wide (Before November 19, 2001)
	30-8466	Plate, Splash, IBD, 22 Inch Wide (After November 19, 2001)
-	30-5904/02	Plate, Splash, IBD, 30 Inch Wide (Before November 19, 2001)
-	30-8564	Plate, Splash, IBD, 30 Inch Wide (After November 19, 2001)
14	82-1535-SP	Drip Tray Assy, IBD, 22 Inch Wide (Before November 19, 2001)
	82-3175-SP	Drip Tray Assy, IBD, 22 Inch Wide (After November 19, 2001)
-	82-1532-SP	Drip Tray Assy, IBD, 30 Inch Wide (Before November 19, 2001)
	82-3177-SP	Drip Tray Assy, IBD, 30 Inch Wide (After November 19, 2001)
15	04-0559	Cap, Protective, Vinyl,VC-375-8

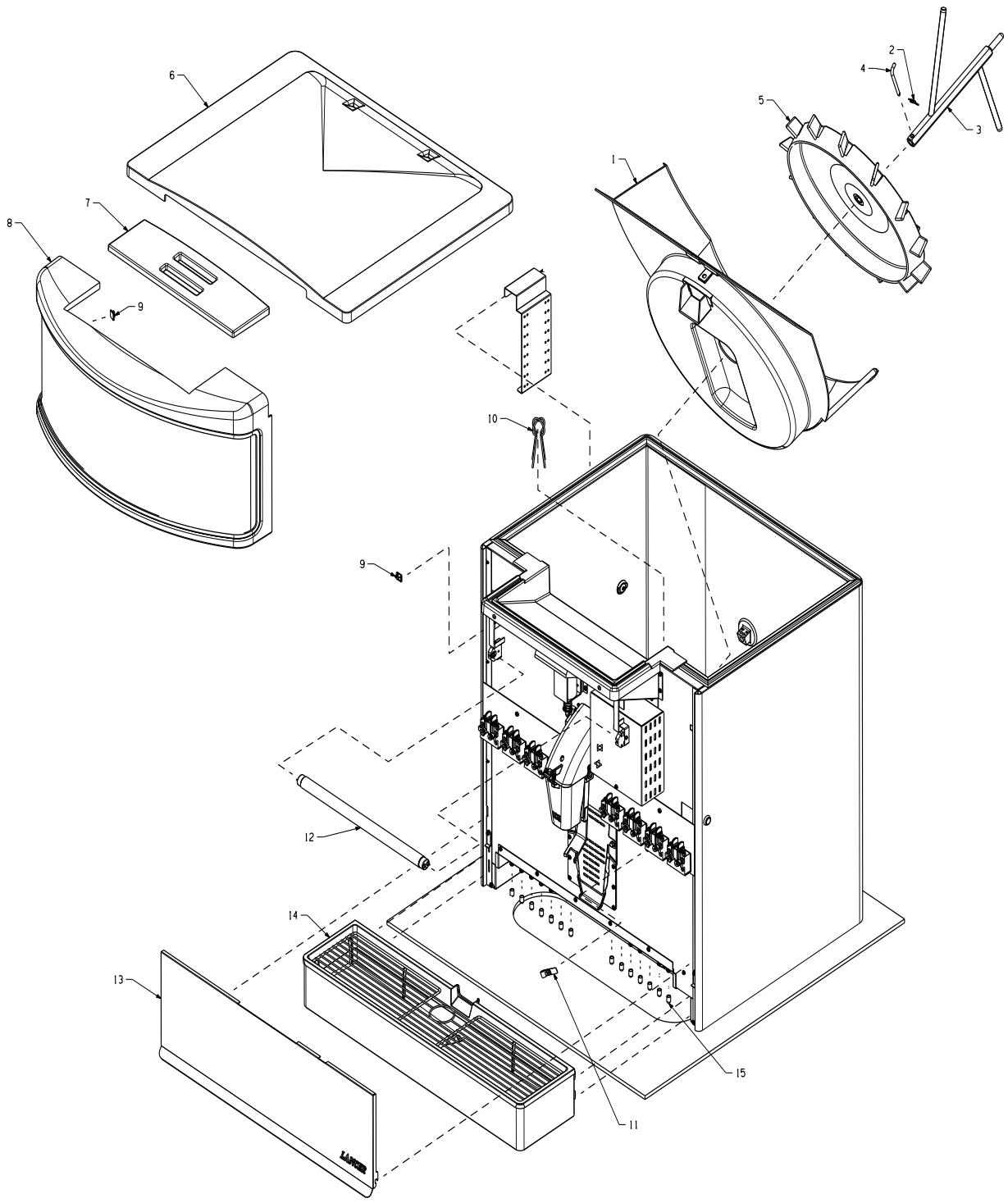
7.3 LCD UNIT, FINAL ASSEMBLY, POST-MIX IBD AND ICE DISPENSER



7.3 LCD UNIT, FINAL ASSEMBLY, POST-MIX IBD AND ICE DISPENSER (CONTINUED)

Item	Part No.	Description
-	85-4548H	IBD30H, Series 4500, 115V/60Hz,8 Valve
-	85-4558H	IBD30H, Series 4500, 230V/50-60Hz,8 Valve
1	05-1310	SHROUD,DSPNSNG WHL,MOD,IBD30 I
2	03-0368	RETAINER, PIN, AGITATOR, IBD
3	23-1373	AGITATOR,ASSY, FS/IBD, HEX
4	10-0762	PIN,HEX DESIGN,FS-30
5	82-3556	DISPENSING WHEEL ASSY,HEX,FS-16
6	05-1606	LID,BACK, IBD30, RND
7	05-1476	LLD,FRONT,IBD,RND
8	04-1377	CLLP,RETAIN,PL,3/8,HEYCO 3637
9	03-0300	CLIP, WIRE, ADHESIVE, HEYCO, IBD
10	23-1038	DRAIN SPIDER, IBD
11	04-0727	NUT, WING,1/4-20,SS
12	04-1592	SCR,10-24X.5,SELF DRILL/TAP,ZN
13	30-10141	SPLASH PLATE,30" MERCURY
14	82-4153	DRIP TRAY ASSY, FS-30
15	04-0559	CAP, PROTECTIVE, VINYL, VC-375-8
16/17	30-10797	BRACKET,SUPPORT,LCD,MERCH30
18	30-9664	BRKT, BIN STAT, UNVRSL ADAPTER
19	04-1591	SCR,4X20,METRIC,PH,PH
20/21	30-10838	BKT,MOUNT,PLT, MTR,IBD30
22	30-10837	PLATE,MNTG,MONITOR,IBD30
23	02-0604	GROMMET SELF RETAINING, SQ
24	03-0049	CLIP, CORD
25	05-1005	COVER, WRAPPER
26	04-0470	SCREW,6-19X.500, PH D, PH/SL,PL T
27	66-1053	MONITOR,20",IN2020M,IBD30
28	04-0504	SCR,8-18X.375,PHD W/ELW,PH,AB
29	51-6373	MERCHANDISER,WELD ASSY,LCD,30
30	04-0148	SCREW,10-32 X .250,THD,SL,MS,SS
31	10-0900	LENS,LCD,MERCHANDISER,IBD30
32	30-10812	FRAME,LCD PLEXIGLASS,IBD30

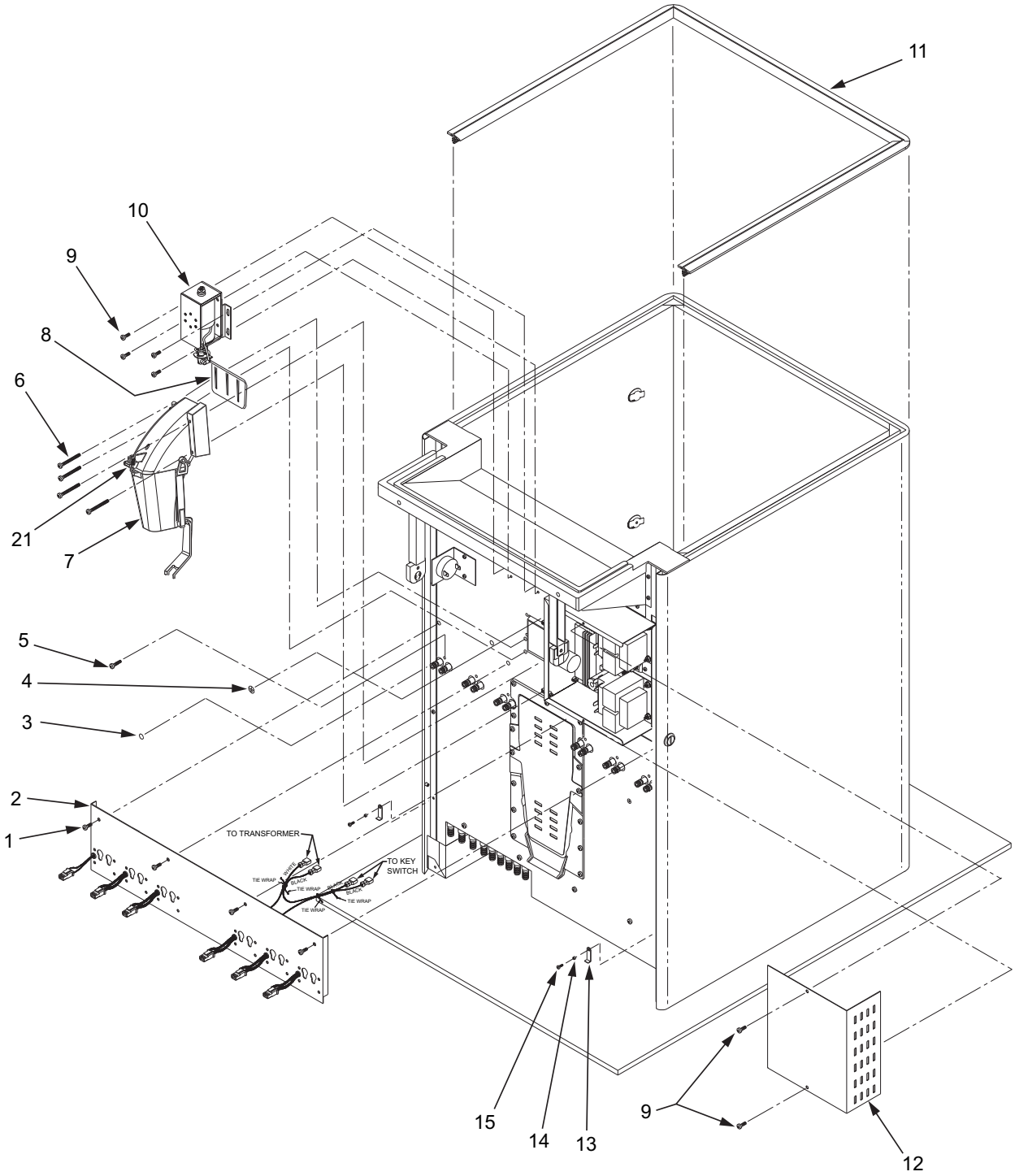
7.4 4600 NO COLD PLATE UNIT, FINAL ASSEMBLY, POST-MIX IBD AND ICE DISPENSER



7.4 4600 NO COLD PLATE UNIT, FINAL ASSEMBLY, POST-MIX IBD AND ICE DISPENSER (CONTINUED)

Item	Part No.	Description
1	05-1310/05	Wheel Shroud, IBD30
2	03-0368	Retainer,Pin, Agitator, IBD,
3	23-1373	Agitator Assy, FS/IBD HEX
4	10-0762	Pin, Agitator, IBD, Single Retainer
5	82-3556	Dispensing Wheel Assy, HEX, IBD, FS-16
6	05-1606	LID,BACK, IBD30, RND
7	05-1476	LLD,FRONT,IBD,RND
8	05-1623	Merchandiser SUBAssy, IBD30, RND
9	03-0300	CLIP, WIRE, ADHESIVE, HEYCO, IBD
10	23-1038/01	Drain, Spider, IBD
11	03-0049	Clip, Cord
12	12-0146/01	Lamp, 18 Inch, 15W, T8, DAYLIGHTS, MDS
13	30-8564	Plate, Splash, IBD, 30 Inch Wide
14	82-4153	Drip Tray Assy, IBD, FS30
15	04-0559	Cap, Protective, Vinyl,VC-375-8

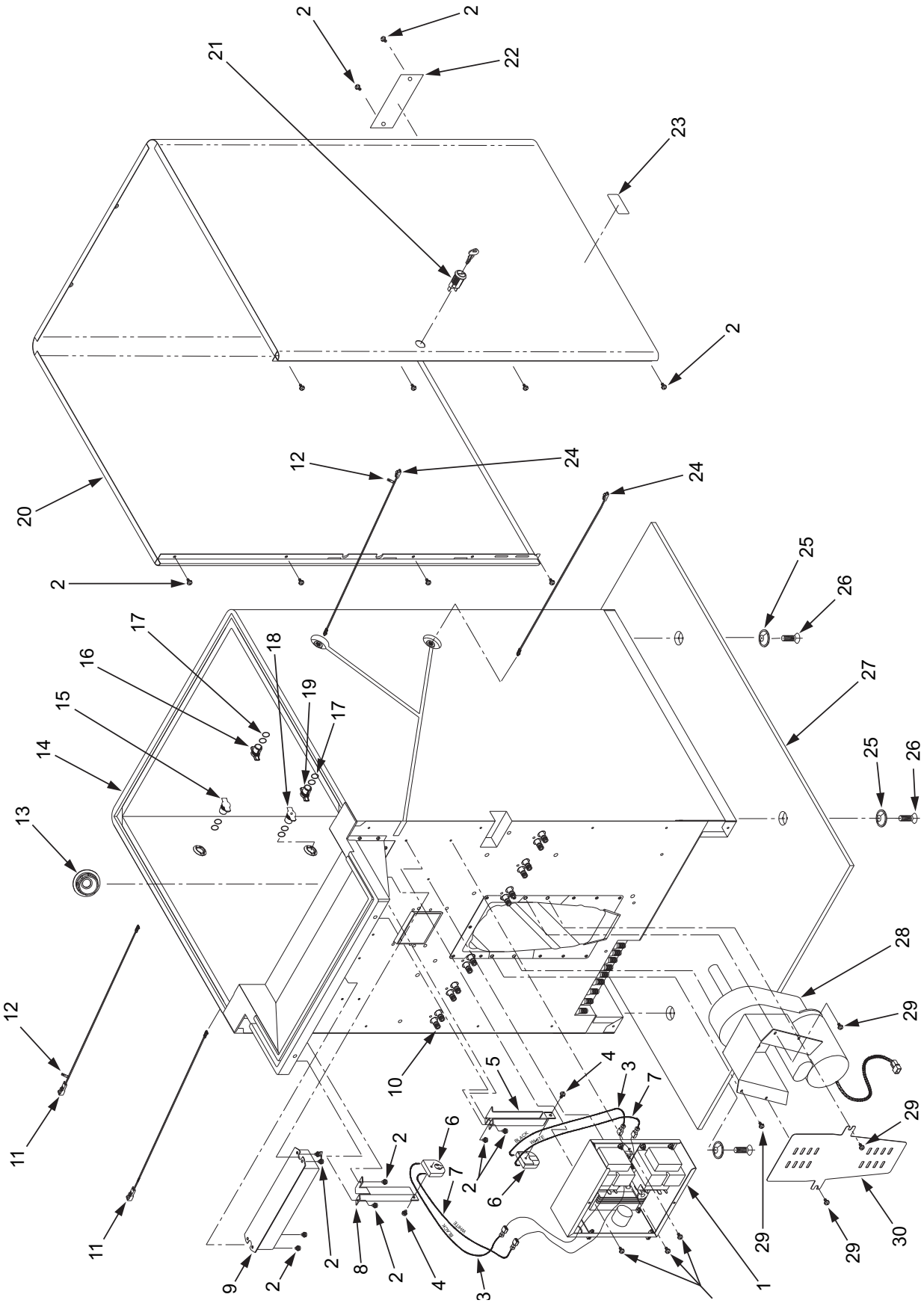
7.5 FAUCET PLATE AND ICE CHUTE SUB-ASSEMBLY, POST-MIX, IBD



7.5 FAUCET PLATE AND ICE CHUTE SUB-ASSEMBLY, POST-MIX, IBD

Item	Part No.	Description
-	85-4526H	IBD22H, Series 4500, 115V/60Hz, 6 Valve
-	85-4548H	IBD30H, Series 4500, 115V/60Hz, 8 Valve
-	85-4536H	IBD22H, Series 4500, 230V/50-60Hz, 6 Valve
-	85-4558H	IBD30H, Series 4500, 230V/50-60Hz, 8 Valve
-	85-4541H	IBD30H, Series 4500, 115V/60Hz,10 Valve
1	04-0308	Screw, 10 - 32 X 0.438
2	82-1559	Faucet Plate Assy, IBD22
-	82-1631	Faucet Plate Assy, IBD30
-	82-1938	Faucet Plate Assy, 10 Valve, IBD30
3	02-0005	O-Ring, 2-010
4	06-0877	Label, Ground
5	04-1089	Screw, 10 - 32 X 1.000, RH, PH/SL
6	04-0553	Screw, 10 - 24 X 1.75, LG.
7	82-3987	Chute Assy, Printed, Small Dispenser, IBD
8	05-0928/02	Trap Door, IBD
9	04-0504	Screw, 8 - 18 X 0.375, PHD
10	82-4226	Solenoid Assy, IBD
11	82-1551/01	Trim Assy, IBD22, Round
-	82-1618/02	Trim Assy, IBD30, Round
12	30-5876/01	Cover, Electrical Box, IBD
13	30-6145	Lock, Drip Tray, IBD
14	10-0364	Spacer, Drip Tray Lock, IBD
15	04-0529	Screw, 8 - 32 x 0.750, PH
16	10-0732	Shaft, ice Chute Door
17	05-0359	Bushing, Shaft
18	03-0113	Ring, Retaining (5144-12)
19	05-0546	Lever, Door,
20	03-0205	Ring, Retaining (5304-25)
21	12-0244	Ice Door Switch

7.6 ELECTRICAL BOX AND GEAR MOTOR SUB-ASSEMBLY, POST-MIX, IBD

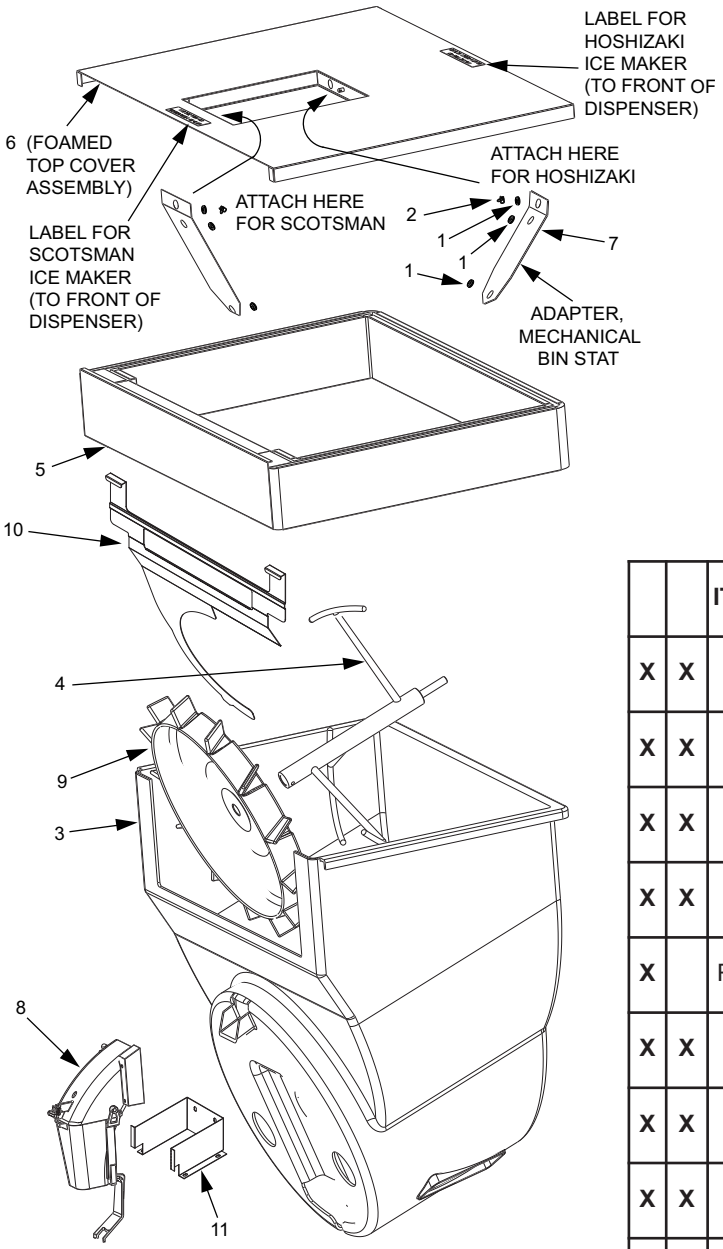


7.6 ELECTRICAL BOX AND GEAR MOTOR SUB-ASSEMBLY, POST-MIX, IBD

Item	Part No.	Description
-	85-4526H	IBD22H, Series 4500, 115V/60Hz, 6 Valve
-	85-4548H	IBD30H, Series 4500, 115V/60Hz, 8 Valve
-	85-4536H	IBD22H, Series 4500, 230V/50-60Hz, 6 Valve
-	85-4558H	IBD30H, Series 4500, 230V/50-60Hz, 8 Valve
-	85-4541H	IBD30H, Series 4500, 115V/60Hz,10 Valve
1*	82-1529/02	Electrical Box Assy, IBD, 115V*
-	82-2017/02	Electrical Box Assy, IBD, 230V
-	52-1527	Power Cord Assy, 115V
-	52-2006	Power Cord Assy, 230V
-	21-0769	Power Cord, Europe
-	52-1436/05	PCB Assy, IBD
2	04-0504	Screw, 8 - 18 X 0.375, PHD
3	52-1584	Harness Assy, Light, Black
4	04-0237	Screw, 8 - 32 x 0.250, PH, MS, SS
5	30-6152	Bracket, Right, Light, IBD
6	11-0295	Socket, 660W/600V MAX
7	52-1583	Harness Assy, Light, White
8	30-6153	Bracket, Left, Light, IBD
9	52-3123	Ballast Assy, Long Lead, 230V, IBD
-	52-1902/01	Ballast Assy, 115V
10	02-0005	O-Ring, 2-010
11	52-2450/01	Harness Assy, Detector
12	06-2488	Label, Ice Link Tag, IBD
13	02-0406/01	Seal, Shaft, Motor, IBD
14	82-1324H	Tank Assy, Foamed, IBD22
-	82-1606H	Tank Assy, Foamed, IBD30
-	82-2225H	Tank Assy, Foamed, IBD30, 10 Valve
15	05-1859	Body, Detector, Sensor, Plug
16	05-1858	Body, Emitter, Sensor, Plug
17	02-0155	O-Ring, 2-015
18	52-2353	Body Assy, Detector, Sensor
19	52-2352	Body Assy, Emitter, Sensor
20	30-8468	Wrapper Assy, IBD22, Round
-	30-8566	Wrapper Assy, IBD30, Round
21**	12-0097	Switch, Key Lock**
22	30-6149	Cover, Cut Out, Wrapper, IBD
23	06-1580	Label, Patent
24	52-2449	Harness Assy, Emitter, IBD
25	07-0211	Washer, Shipping Base
26	04-0203	Screw, 3/8 - 16 X 1.00, FHD
27	90-0756	Shipping Board, IBD, 22 Inch Wide
-	90-0760	Shipping Board, IBD, 30 Inch Wide
28	82-3688	Drive Assy, Motor, HEX, IBD, 115V
-	82-2018	Drive Assy, Motor, IBD, 230V
29	04-0069	Screw, 10 - 16 X 0.500
30	30-6147	Cover, Motor, IBD
--	05-1555	Rear Bearing (Not Shown)
REF		Ballast Assy Components (Not Shown)
--	12-0104	Starter, 115VAC, 14-20 WA
--	12-0194	Starter, Base
REF		Electrical Box Assy Components (Not Shown)
*--	52-1436/05	PCB Assy, Available as Spare Part
*--	25-0039	120V-24V Transformer, Available as Spare Part
*--	25-0047	75VA-24V Transformer, Available as Spare Part
*--	25-0040	220V-24V Transformer, Available as Spare Part
**--	81-0125	Key, Available as Spare Part

7.7 PELLET ICE DISPENSER SUB-ASSEMBLY, IBD30, CONVERSION KIT, PN 82-3633/01

NOTE: This Conversion Kit is compatible for IBDs with Serial Numbers 854545H0418M03 and above Retrofits for the 30" IBD must include PN 23-1363 (Item 5).



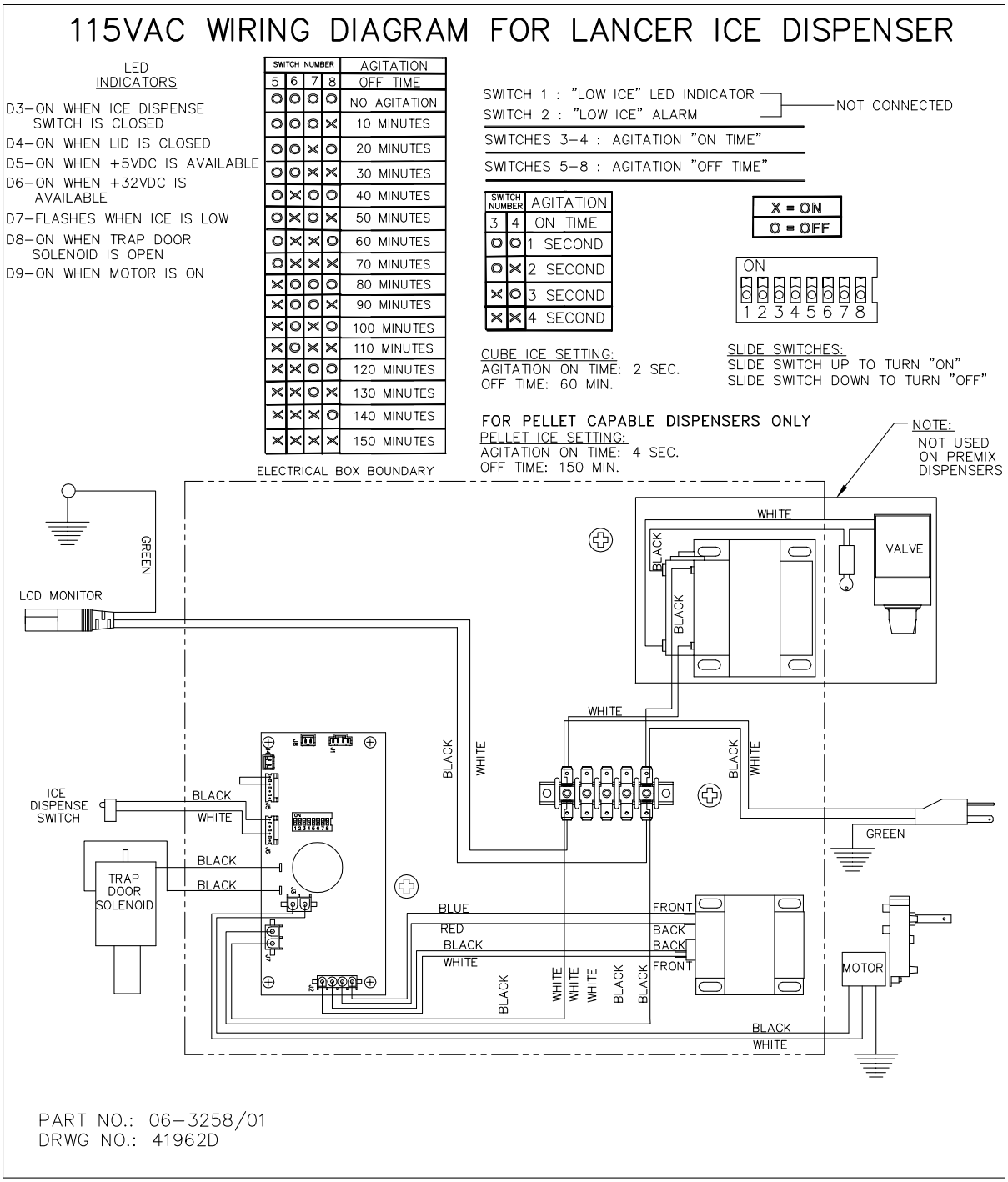
		ITEM	PART NO	DESCRIPTION	QTY
X	X	1	02-0577	Grommet, Rubber, G3002	3
X	X	2	03-0368	Retainer, Pin, Agitator, IBD	1
X	X	3	05-2293/01	Ice Shroud, IC	1
X	X	4	23-1401	Agitator Assy, Helical, IC, HEX	1
X		R 5	23-1363	Extension Assy, 4 1/2", IBD30	1
X	X	6	42-0109	Foamed Cover, Scots/Hoshi Pellet Ice	1
X	X	7	30-9446	Adapter, Mech Bin-Stat, Scots	1
X	X	8	82-3538	Ice Chute Assy, IBD30, Pellet Ice	1
X	X	9	82-3651	Dispensing Wheel Assy, Pellet Ice, HEX	1
X	X	10	30-9880	Shield, Nugget Ice, One Piece with Tab	1
	X	11	30-8832/01	Bracket, Valve Plate, FS30	1

An R next to the Item Number indicates new, revised or realigned information.

An X in the left columns indicates the parts used in the installation for an IBD30 Dispenser or an FS30 Dispenser.

NOTE: Item 11 is NOT used on the IBD 4500 Series.

7.8 WIRING DIAGRAM - 115V/60HZ



7.9 WIRING DIAGRAM - 230V/50-60HZ

230VAC WIRING DIAGRAM FOR LANCER ICE DISPENSER

LED INDICATORS

D3–ON WHEN ICE DISPENSE SWITCH IS CLOSED
D4–ON WHEN LID IS CLOSED
D5–ON WHEN +5VDC IS AVAILABLE
D6–ON WHEN +32VDC IS AVAILABLE
D7–FLASHES WHEN ICE IS LOW
D8–ON WHEN TRAP DOOR SOLENOID IS OPEN
D9–ON WHEN MOTOR IS ON

SWITCH NUMBER				AGITATION
5	6	7	8	OFF TIME
O	O	O	O	NO AGITATION
O	O	O	X	10 MINUTES
O	O	X	O	20 MINUTES
O	O	X	X	30 MINUTES
O	X	O	O	40 MINUTES
O	X	O	X	50 MINUTES
O	X	X	O	60 MINUTES
O	X	X	X	70 MINUTES
X	O	O	O	80 MINUTES
X	O	O	X	90 MINUTES
X	O	X	O	100 MINUTES
X	O	X	X	110 MINUTES
X	X	O	O	120 MINUTES
X	X	O	X	130 MINUTES
X	X	X	O	140 MINUTES
X	X	X	X	150 MINUTES

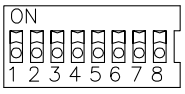
SWITCH 1 : "LOW ICE" LED INDICATOR
SWITCH 2 : "LOW ICE" ALARM
NOT CONNECTED

SWITCHES 3–4 : AGITATION "ON TIME"

SWITCHES 5–8 : AGITATION "OFF TIME"

SWITCH NUMBER		AGITATION
3	4	ON TIME
O	O	1 SECOND
O	X	2 SECOND
X	O	3 SECOND
X	X	4 SECOND

X = ON
O = OFF



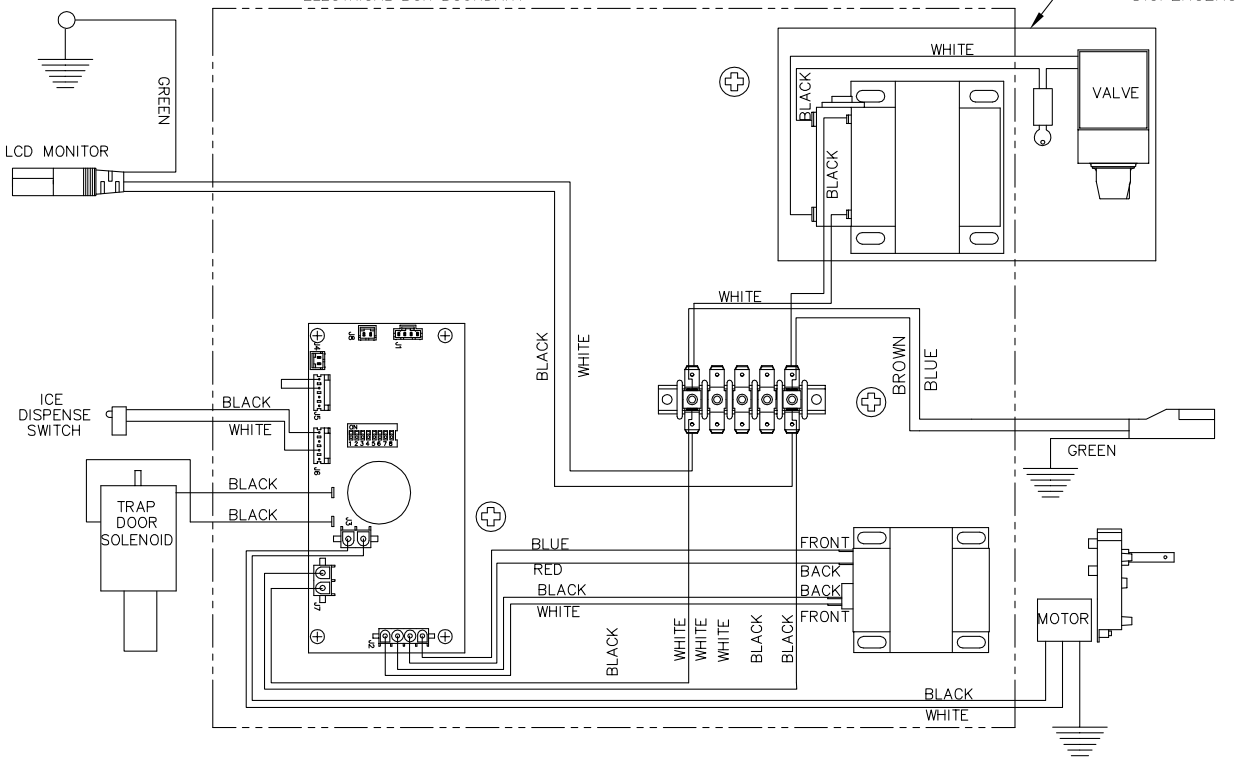
CUBE ICE SETTING:
AGITATION ON TIME: 2 SEC.
OFF TIME: 60 MIN.

SLIDE SWITCHES:
SLIDE SWITCH UP TO TURN "ON"
SLIDE SWITCH DOWN TO TURN "OFF"

FOR PELLET CAPABLE DISPENSERS ONLY
PELLET ICE SETTING:
AGITATION ON TIME: 4 SEC.
OFF TIME: 150 MIN.

NOTE:
NOT USED ON PREMIX DISPENSERS

ELECTRICAL BOX BOUNDARY



PART NO.: 06–3261
DRWG NO.: 42055D

EXPANDED VIEW OF CONTROLS

LED
INDICATORS

D3-ON WHEN ICE DISPENSE SWITCH IS CLOSED

D4-ON WHEN LID IS CLOSED

D5-ON WHEN +5VDC IS AVAILABLE

D6-ON WHEN +32VDC IS AVAILABLE

D7-FLASHES WHEN ICE IS LOW

D8-ON WHEN TRAP DOOR SOLENOID IS OPEN

D9-ON WHEN MOTOR IS ON

SWITCH NUMBER				AGITATION
5	6	7	8	OFF TIME
O	O	O	O	NO AGITATION
O	O	O	X	10 MINUTES
O	O	X	O	20 MINUTES
O	O	X	X	30 MINUTES
O	X	O	O	40 MINUTES
O	X	O	X	50 MINUTES
O	X	X	O	60 MINUTES
O	X	X	X	70 MINUTES
X	O	O	O	80 MINUTES
X	O	O	X	90 MINUTES
X	O	X	O	100 MINUTES
X	O	X	X	110 MINUTES
X	X	O	O	120 MINUTES
X	X	O	X	130 MINUTES
X	X	X	O	140 MINUTES
X	X	X	X	150 MINUTES

CUBE ICE SETTING:
AGITATION ON TIME: 2 SEC.
OFF TIME: 60 MIN.

FOR PELLET CAPABLE DISPENSERS ONLY

PELLET ICE SETTING:
AGITATION ON TIME: 4 SEC.
OFF TIME: 150 MIN.

SWITCH 1 : "LOW ICE" LED INDICATOR

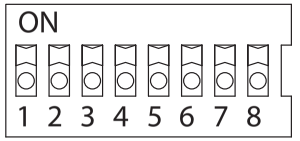
SWITCH 2 : "LOW ICE" ALARM

SWITCHES 3-4 : AGITATION "ON TIME"

SWITCHES 5-8 : AGITATION "OFF TIME"

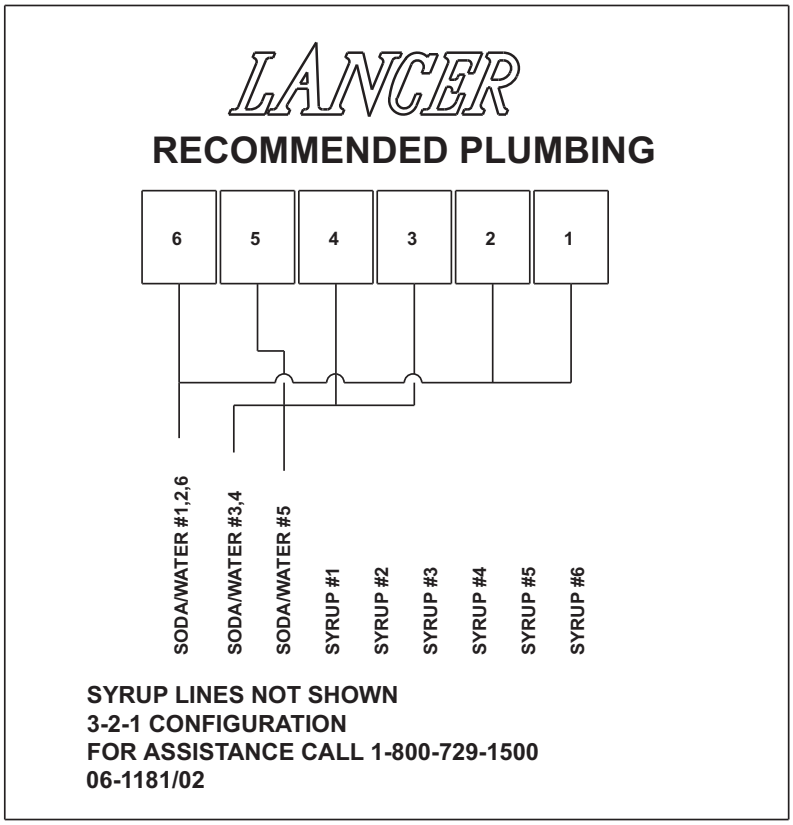
SWITCH NUMBER		AGITATION
3	4	ON TIME
O	O	1 SECOND
O	X	2 SECOND
X	O	3 SECOND
X	X	4 SECOND

X = ON
O = OFF

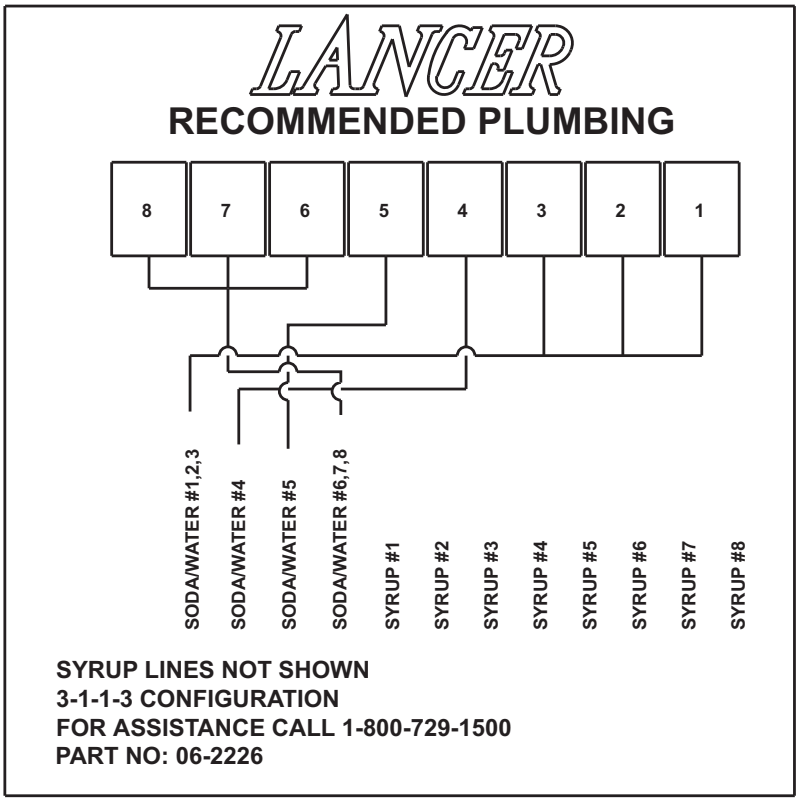


SLIDE SWITCHES:
SLIDE SWITCH UP TO TURN "ON"
SLIDE SWITCH DOWN TO TURN "OFF"

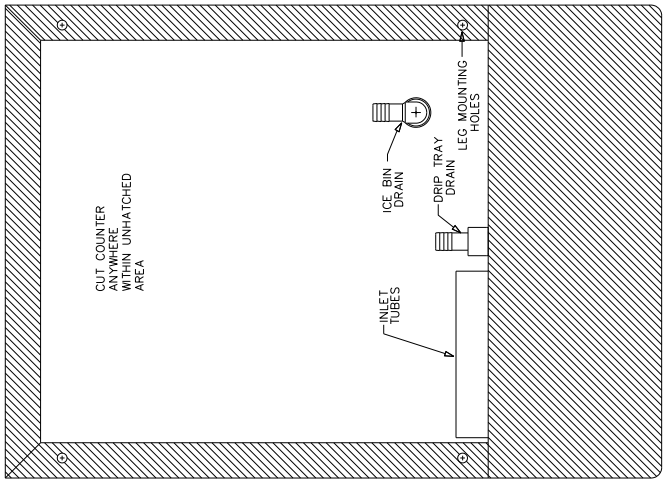
7.11 RECOMMENDED PLUMBING, SIX (6) VALVE



7.12 RECOMMENDED PLUMBING, EIGHT (8) VALVE

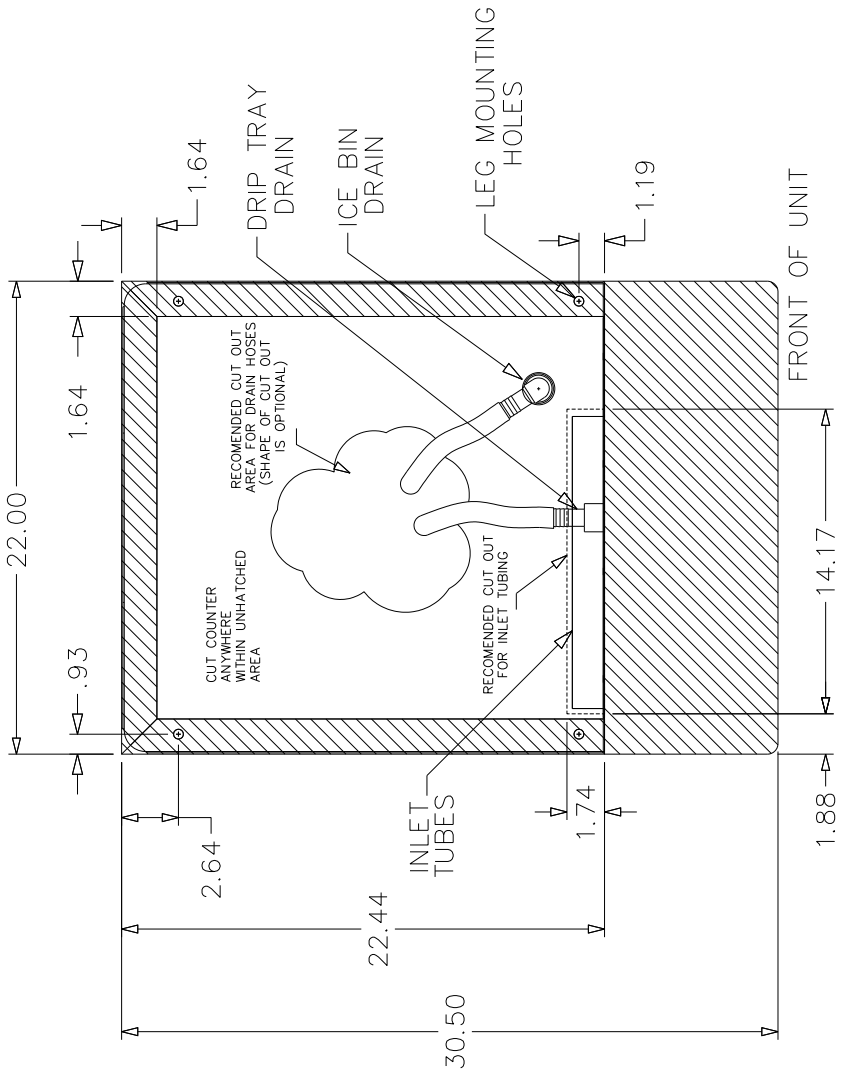


7.13 IBD 22" COUNTER CUTOUT



TOP VIEW OF
FOOTPRINT

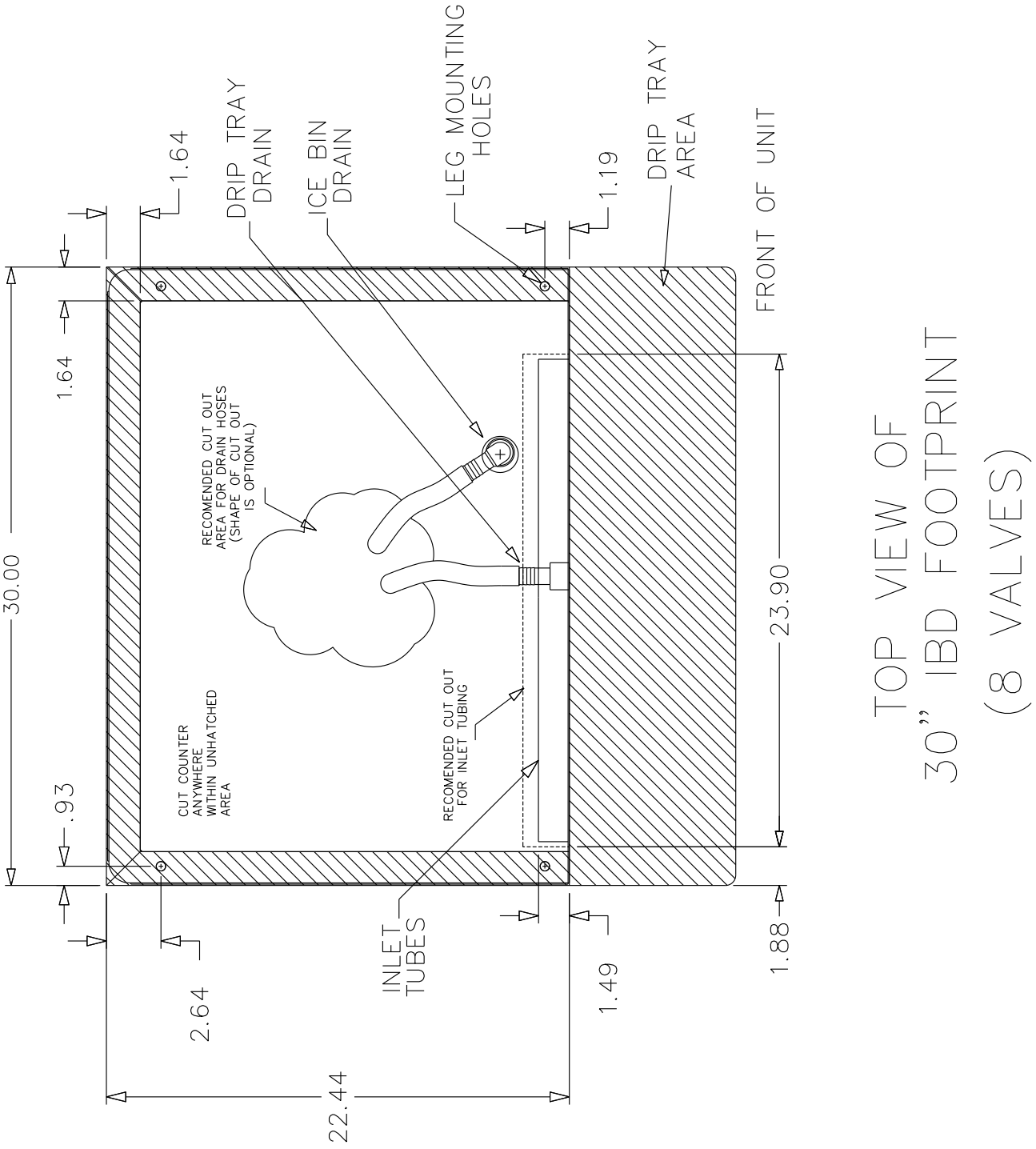
OLD DESIGN



TOP VIEW OF
IBD22 FOOTPRINT
(6 VALVES)

NEW DESIGN

7.14 IBD 30” COUNTER CUTOUT



TOP VIEW OF
30” IBD FOOTPRINT
(8 VALVES)

8. DISPENSER DISPOSAL

To prevent possible harm to the environment from improper disposal, recycle the unit by locating an authorized recycle outlet or contact the retailer where the product was purchased. Comply with local regulations regarding disposal of the refrigerant and insulation.

LANCER
To order parts, call
Customer Service: 800-729-1500
Warranty/Technical Support: 800-729-1550
Email: custserv@lancercorp.com
www.lancercorp.com